

# User Manual

**CDG561 WiFi HSPA Router**

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**FCC Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against radio interference in a commercial environment. This equipment can generate, use and radiate radio frequency energy and, if not installed and used in accordance with the instructions in this manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures are necessary to correct the interference.

**CE Declaration of Conformity**

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022/A1 Class B.





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# Chapter 1 Introduction

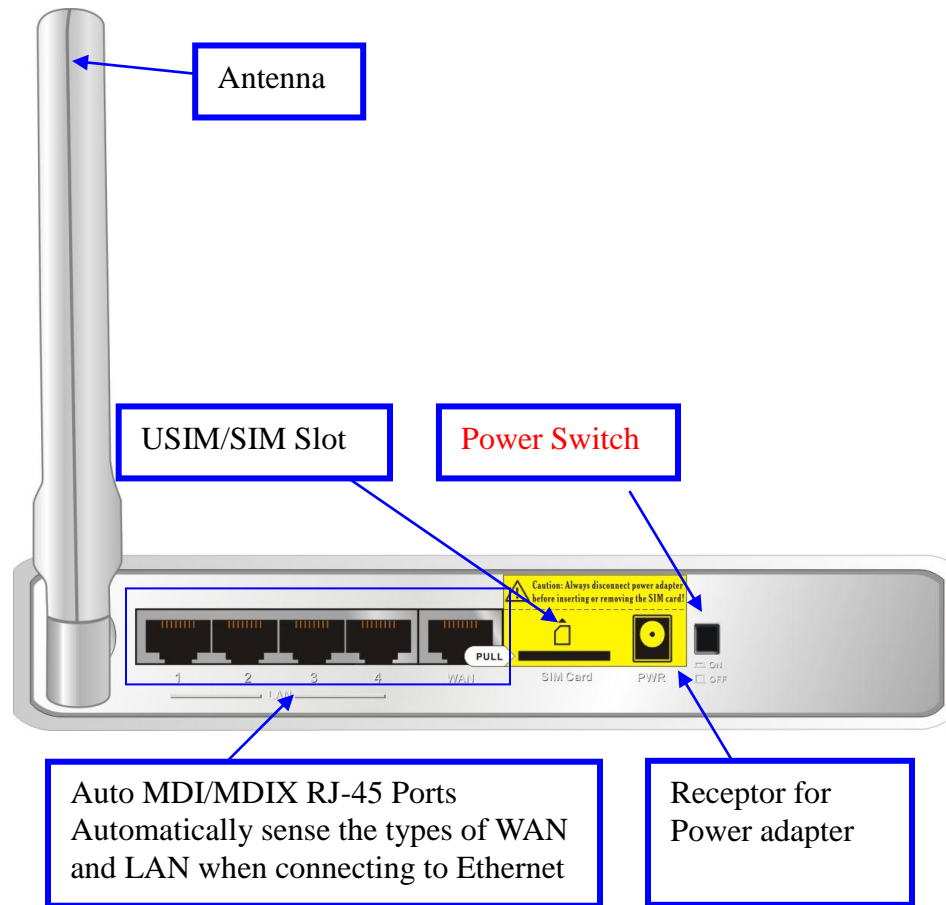
Congratulations on your purchase of this outstanding **CDG561**, 802.11n Wireless HSPA Router. The device is a WiFi-supported HSPA router with built-in HSUPA embedded module. It supports NAT, routing, firewall, VPN pass-through, auto-3G-dial-up backup connection, DHCP server, and so on. And is easy to configure and operate even for non-technical users. Instructions for installing and configuring this product can be found in this manual. Before you install and use this product, please read this manual carefully for fully exploiting the functions of this product.

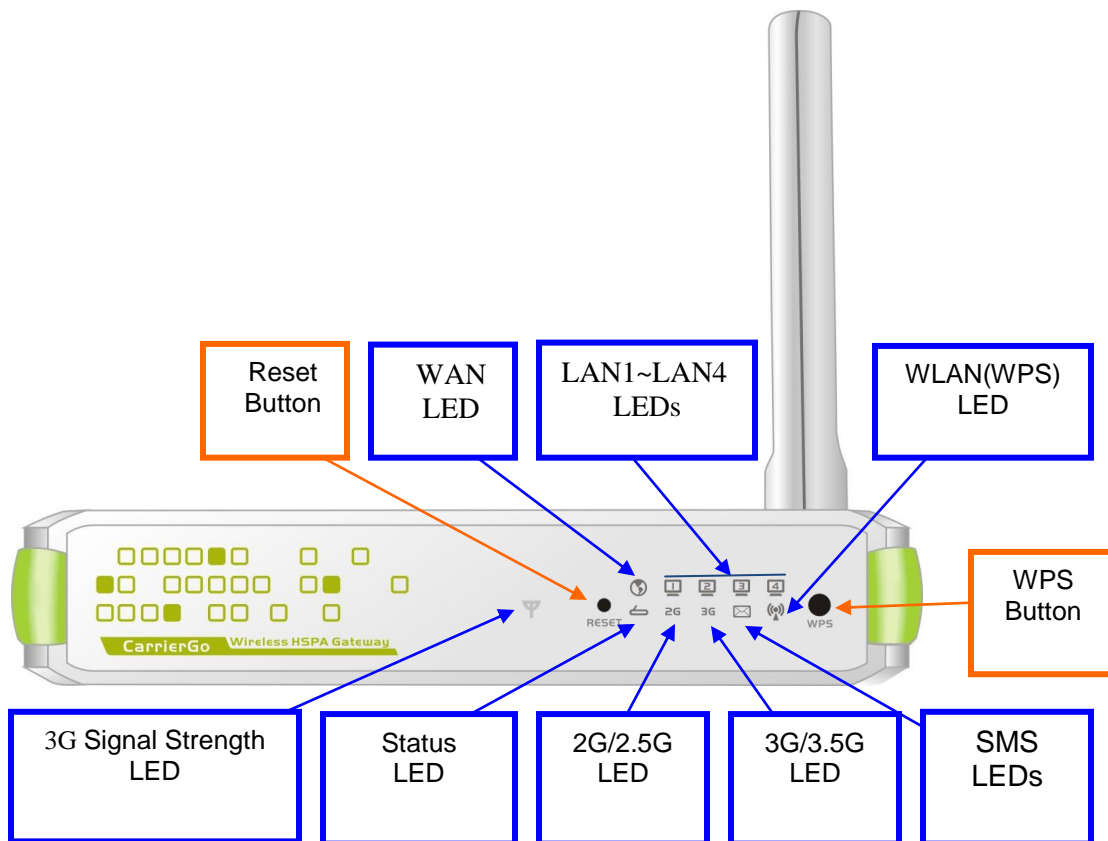
## 1.1 Package List

items	Description	Contents	Quantity
1	WiFi HSPA Router		1
2	RJ-45 Cable		1
3	Power adapter		1
4	CD		1

## 1.2 Hardware Installation

### Hardware configuration





## **LED indicators**

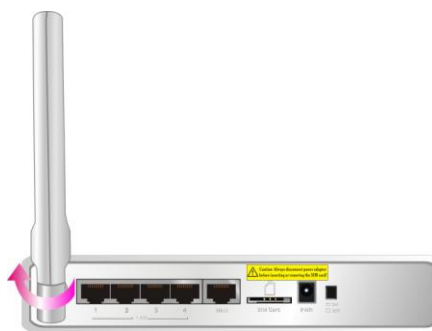
	LED status	Description
Status	Green in flash	Device status is working.
3G Signal Strength LED	Red in flash	Disconnected. No SIM card / signal or unverified PIN code
	Amber in flash	Connecting.
	Red	Connected. Signal strength in level one (weak)
	Red in quick flash	Roaming alert, and 3G signal is weak
	Amber	Connected. Signal strength in level two or three (middle)
	Amber in quick flash	Roaming alert, and 3G signal is middle

	Green	Connected. Signal strength in level four or five (strong)
	Green in quick flash	Roaming alert, and 3G signal is strong
2G/2.5G LED	Green	EDGE or GPRS connection is established
	Green in flash	Data packet transferred via 2G/2.5G
3G/3.5G LED	Green	UMTS/HSDPA/HSUPA connection is established
	Green in flash	Data packet transferred via 3G/3.5G
SMS LED	Green	SMS storage is full
	Green in flash	There is any unread SMS in the storage
WAN LED	Green	RJ45 cable is plugged
	Green in flash	Data access
LAN LED	Green	RJ45 cable is plugged
	Green in flash	Data access
WiFi LED	Green	WLAN is on
	Green in flash	Data access
	Green in fast flash	Device is in WPS PBC mode

## How to operate

### **Step 1. Attach the antenna.**

- 1.1. Remove the antenna from its plastic wrapper.
- 1.2. Screw the antenna in a clockwise direction to the back panel of the unit.
- 1.3. Once secured, position the antenna upward at its connecting joint. This will ensure optimal reception.
- 1.4. And rip the "USIM/SIM & PWR" sign label from "Pull" tag.



**1. Turn off the Power Switch first.**

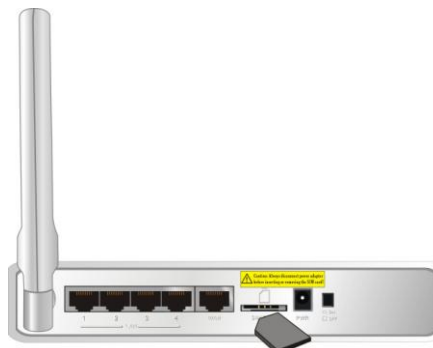
**2. DO NOT** connect 802.11n Wireless HSPA Router to power before performing the installation steps below.

## Step 2. Insert SIM/USIM to IAD.

### NOTE:

2.1. The 802.11n Wireless HSPA Router builds in a HSUPA 3G modem card. Please refer to your service provider for detailed feature information.

2.2. A 3G SIM/USIM Card with data services is MUST.



## Step 3. Insert the Ethernet cable into LAN Port:

Insert the Ethernet patch cable into LAN port on the back panel of the 802.11n Wireless HSPA Router, and an available Ethernet port on the network adapter in the computer you will use to configure the unit.



## Step 4. Insert the Ethernet patch cable into Wired WAN port:

Insert the Ethernet patch cable into Wired WAN port on the back panel of the 802.11n Wireless HSPA Router.

**NOTE: The step does not need if you select the 3G Wireless WAN.**



## Step 5. Power on the IAD:

5.1. Connect the power adapter to the receptor on the back panel of your 802.11n Wireless HSPA Router.

5.2. Then plug the other end of the power adapter into a wall outlet or power strip.

5.3. Turn on the Power Switch.



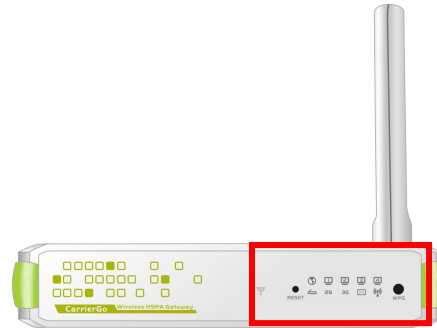


**Step 6. Complete the setup.**

6.1. All LEDs will transient illumination to indicate power has been applied.

6.2. And then LEDs will flash ON and OFF as the 802.11n Wireless HSPA Router performs initialization and Internet connection processes. This will take a few minutes.

6.3. When complete, the Status LED will flash.



## Chapter 2 Getting start

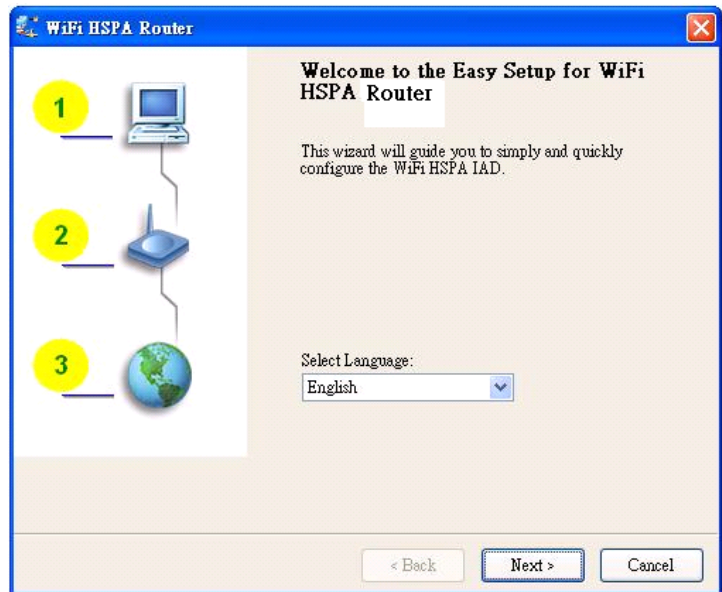
Insert the CD into CD reader on your PC. The program, AutoRun, will be executed automatically. And then you can click the Easy setup Icon for this utility. Configure the settings by the following steps.

### 2.1 Easy Setup by Windows Utility

You can also use the Easy Setup Utility to configure it

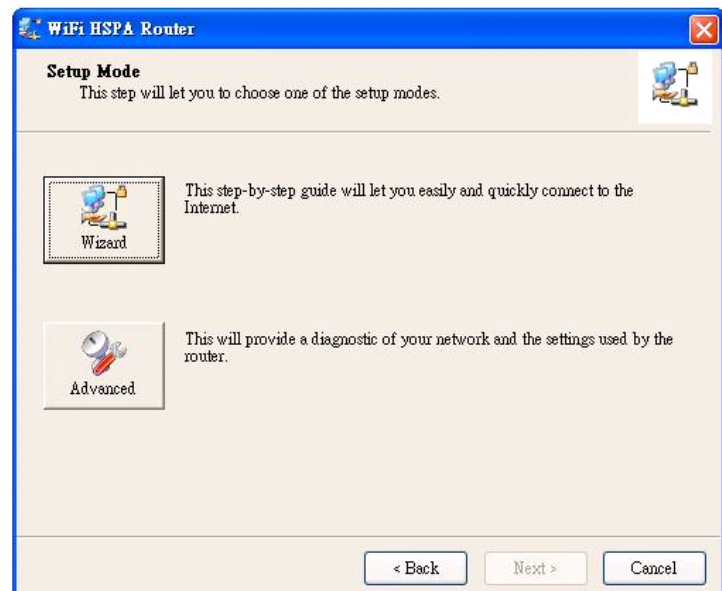
#### Step 1. Select your language.

Select Language then click “Next” for continues.



#### Step 2. Setup mode

You can select Wizard mode to run the setup step-by-step or run advanced mode to diagnose the network settings of the router.



### Step 3. Advanced mode Setup.

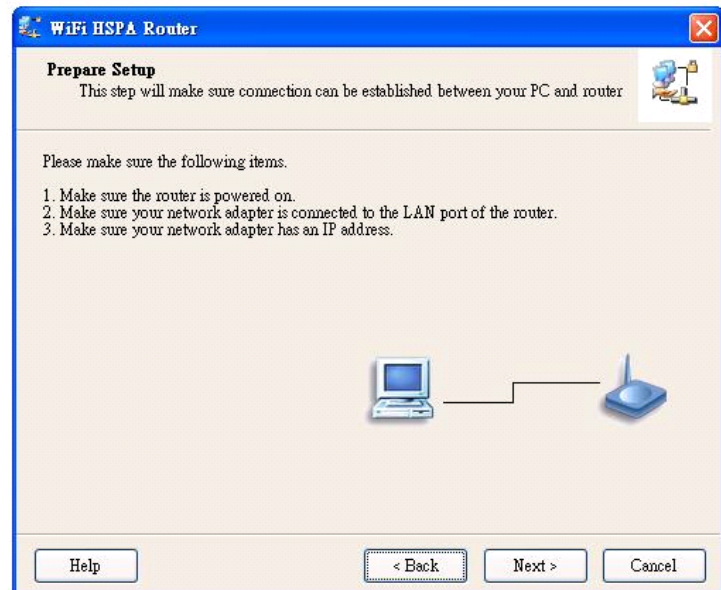
Check the PC, Router or Internet icons for the Status of PC, Router or Internet.



### Step 4. Wizard mode-Prepare Setup

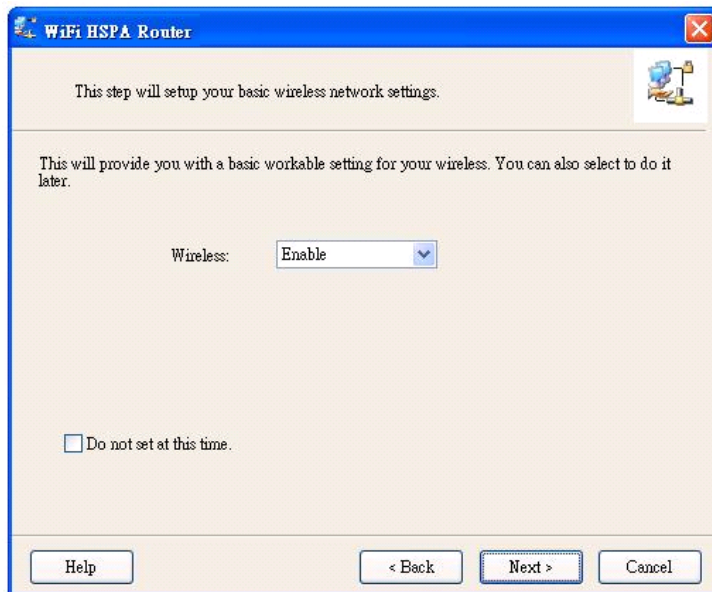
1. Make sure the router is powered on.
2. Make sure your network adapter is connected to the LAN port of the router
3. Make sure your network adapter has an IP address.

Click "Next" for continues



### Step 5. Wireless Setting.

Select Wireless Enable or Disable, then click “Next” for continues.



This step will setup your basic wireless network settings.

This will provide you with a basic workable setting for your wireless. You can also select to do it later.

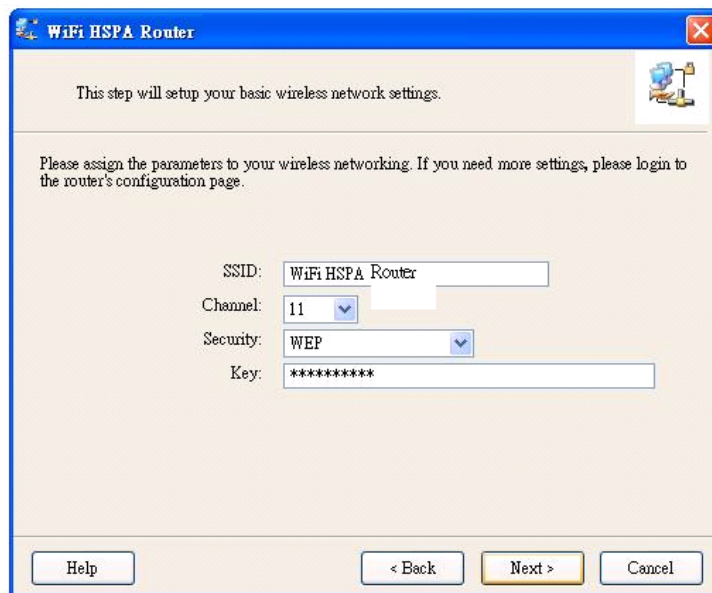
Wireless:

☐ Do not set at this time.

Help < Back Next > Cancel

### Step 6. Wireless Setting.

Key in the SSID, Channel and Security options, and then click “Next” for continues.



This step will setup your basic wireless network settings.

Please assign the parameters to your wireless networking. If you need more settings, please login to the router's configuration page.

SSID:

Channel:

Security:

Key:

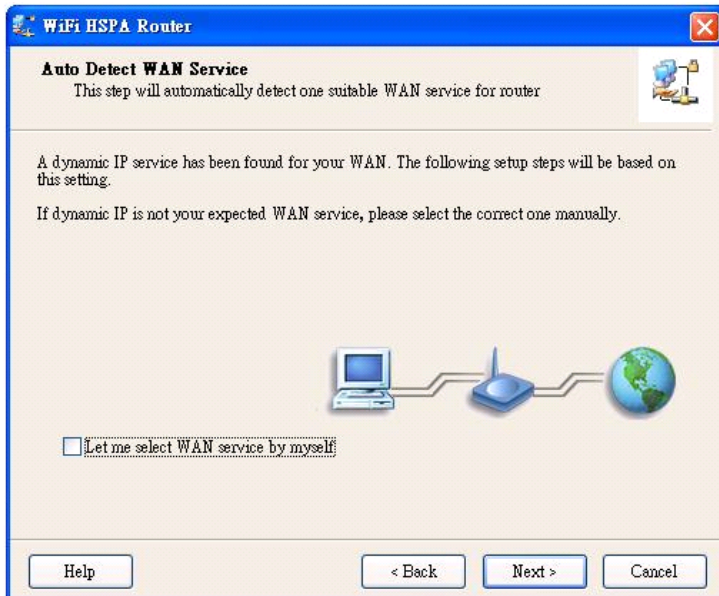
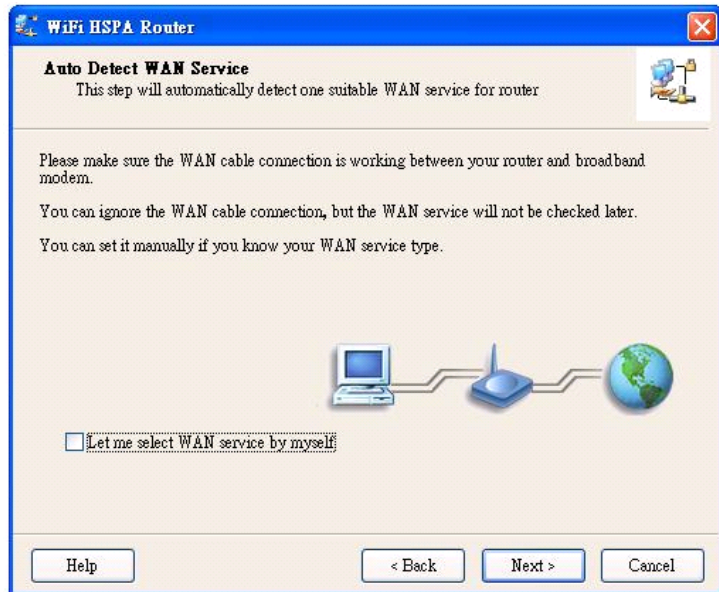
Help < Back Next > Cancel

### Step 7. Auto Detect WAN Service.

Click "Next" for continue.

Click the button, "Let me select WAN service by myself", to disable this function.

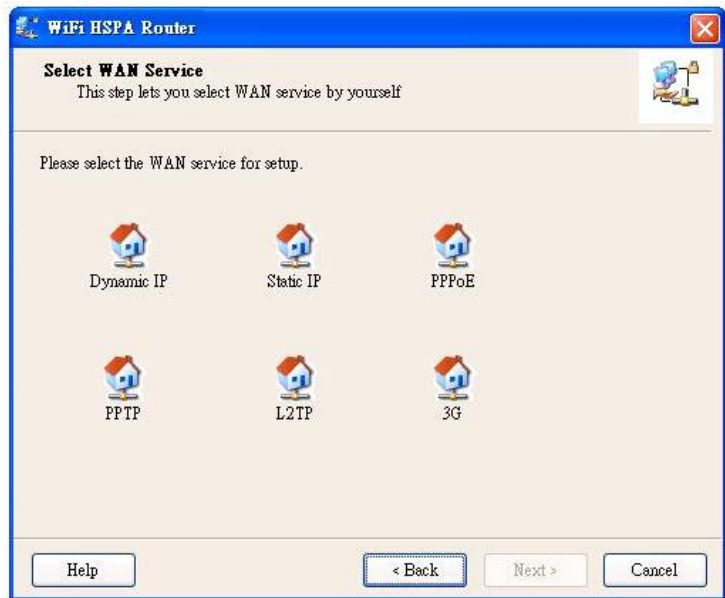
Note: The Item supports to detect the Dynamic and PPPoE WAN Services only



Example, the Dynamic WAN type is detected.

## Step 8. Manual select WAN Service

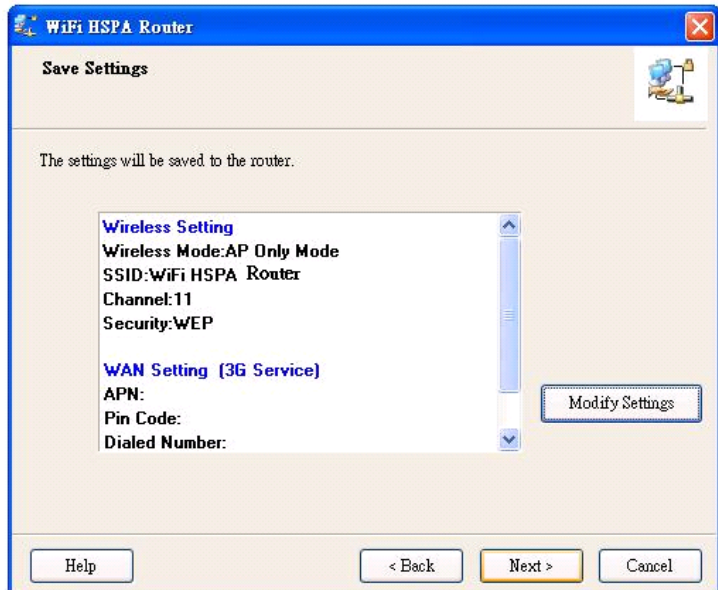
In the manual mode, Click the any icons for continues.



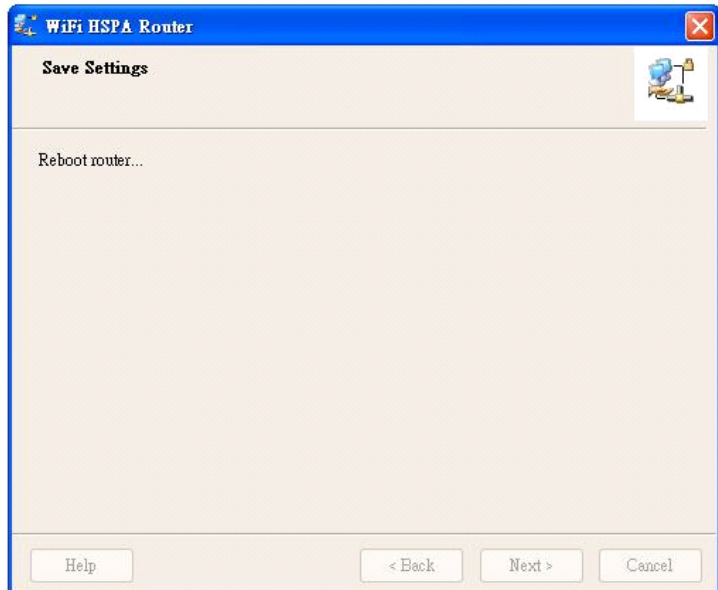
Example, 3G WAN Service:  
Please fill in 3G service information  
which is provided by your ISP.

The screenshot shows the 'WAN Setting' window for '3G Service' in the 'WiFi HSPA Router' configuration utility. The window has a blue title bar with the text 'WiFi HSPA Router' and a close button. Below the title bar, the main heading is 'WAN Setting' with a subtitle '3G Service'. A small icon of a router is in the top right corner. The main area contains the instruction 'Please input the WAN service information.' followed by five input fields with labels to their left: 'APN:', 'Pin Code:', 'Diald Number:', 'Username:', and 'Password:'. To the right of the 'APN:' and 'Pin Code:' fields, the text '(Optional)' is displayed. At the bottom of the window, there are four buttons: 'Help', '< Back', 'Next >', and 'Cancel'.

**Step 9. Summary of the settings.**  
Click "Next" for continue.

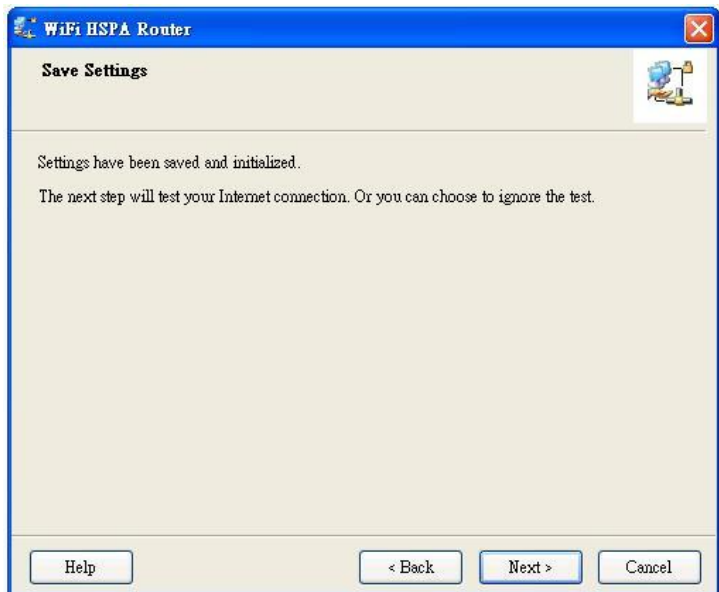


**Step 10. Reboot**  
The 802.11n Wireless HSPA Router is rebooted.





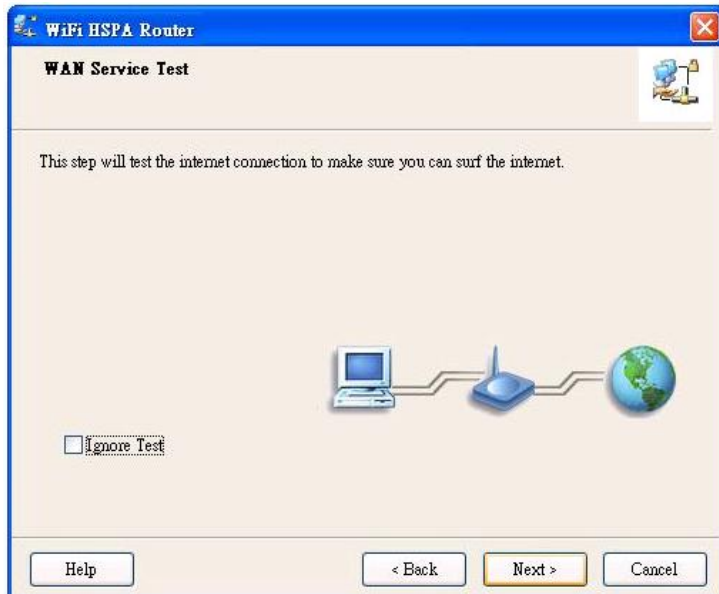
**Step 11. Applied the Settings.**  
Click "Next" for continue.



**Step 12. Test the Internet connection.**

Test WAN Networking service. Click "Next" for continue.

**You can ignore the by select the "Ignore Test".**

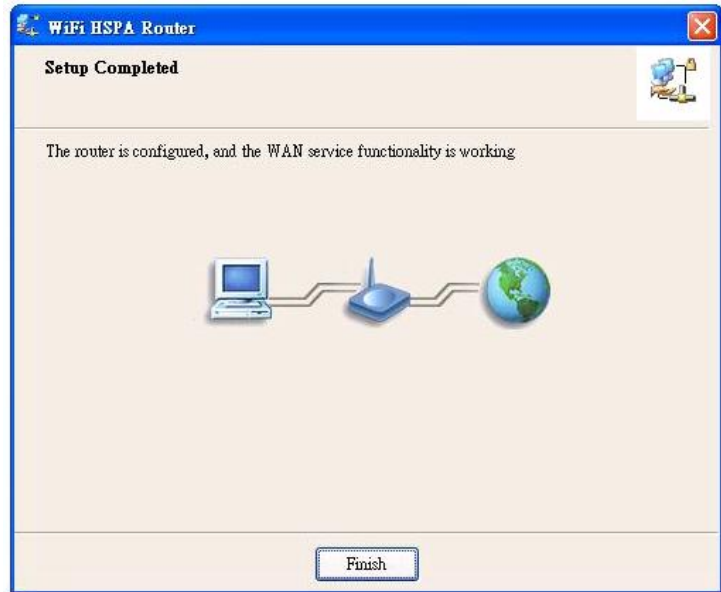




### Step 13. Setup Completed.

13.1. The EzSetup is finish; you can open the default web browser to configure advanced settings of the 802.11n Wireless HSPA Router.

13.2. Click “Finish” to complete the installation.



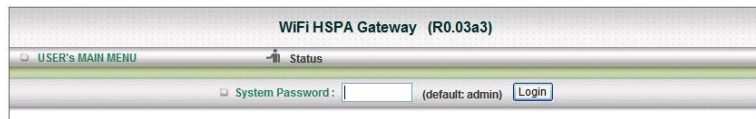
# Chapter 3 Making Configuration

## 3.1 Web Wizard

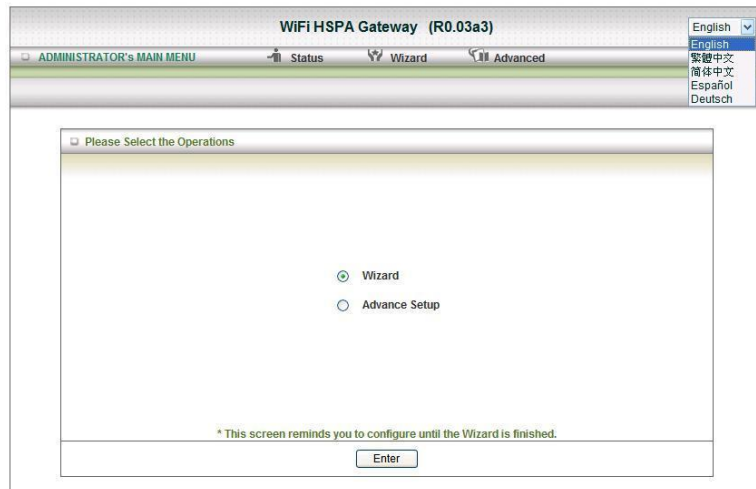
Type in the IP Address  
(<http://192.168.123.254>)



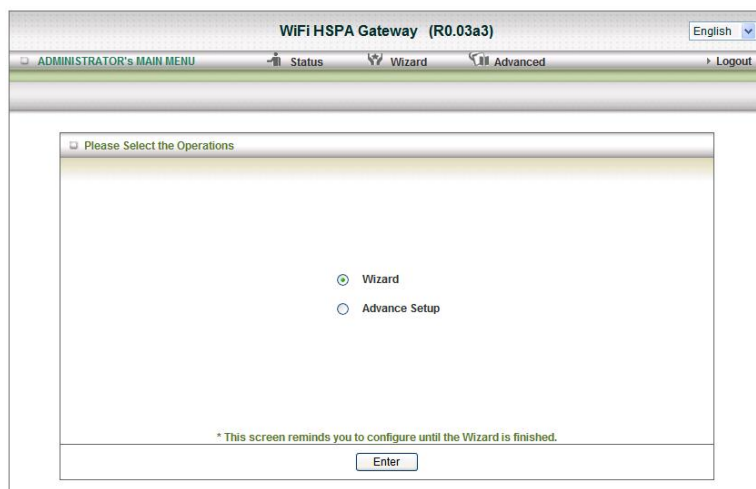
Type Password, the default is  
“admin” and click ‘login’ button.



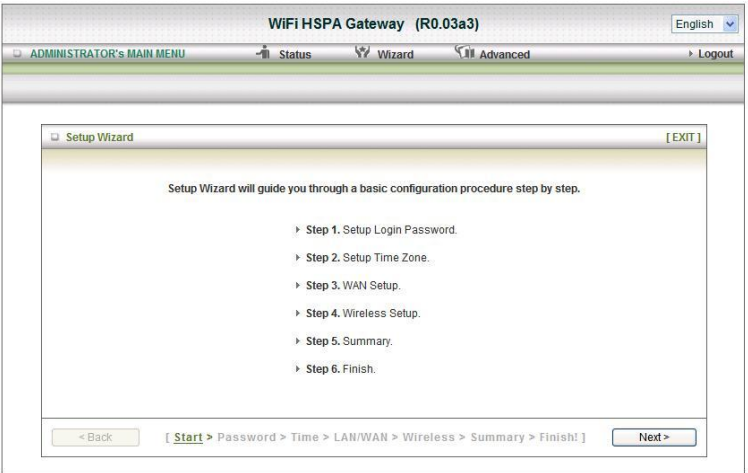
Select your language.



Press “Wizard” for basic  
settings with simple way.

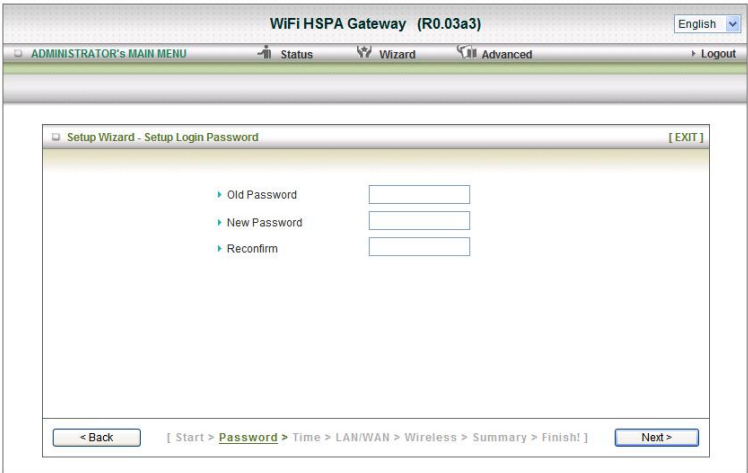


Press “Next” to start wizard.

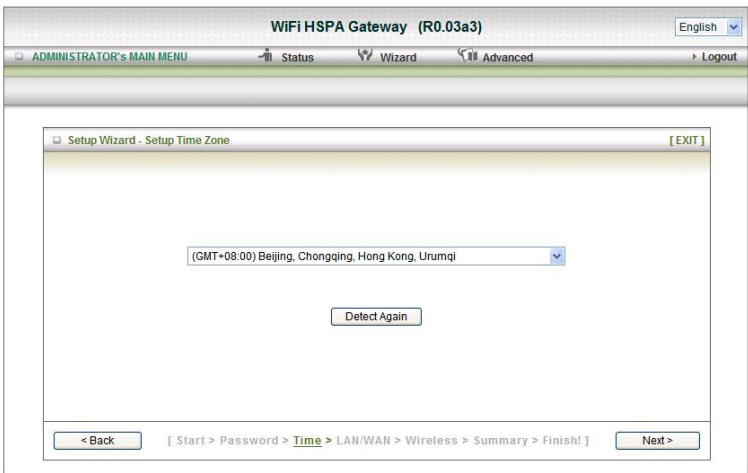


## wizard

Step 1:  
Set up your system password.



Step 2:  
Select Time Zone.



Step 3:  
Select Wan Type.

Auto Detecting or  
Setup Manually.

WIFI HSPA Gateway (R0.03a3) English

ADMINISTRATOR'S MAIN MENU Status Wizard Advanced Logout

Setup Wizard - Select WAN Type [EXIT]

☒ Auto Detecting WAN Type

☐ Setup WAN Type Manually

< Back [ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ] Next >

Setup the LAN IP and WAN  
Type.

WIFI HSPA Gateway (R0.03a3) English

ADMINISTRATOR'S MAIN MENU Status Wizard Advanced Logout

Setup Wizard - Select WAN Type [EXIT]

▶ LAN IP Address 192.168.123.254

▶ WAN Interface Wireless WAN

▶ WAN Type 3G

< Back [ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ] Next >

*Example:*

**Step 4:**  
Please fill in 3G service  
information which is provided by  
your ISP.

The screenshot shows the 'Setup Wizard - 3G' window. It has a title bar with 'WiFi HSPA Gateway (R0.03a3)' and a language dropdown set to 'English'. The main menu includes 'ADMINISTRATOR'S MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. The wizard progress bar shows 'LAN/WAN' as the current step. The '3G' section has two options: 'Auto-Detection' (selected) and 'Manual'. Below 'Manual' is a text input field labeled '(optional)'. The left sidebar lists 'Dial-Up Profile' and 'PIN Code'. At the bottom, there are '< Back' and 'Next >' buttons, and a progress path: '[ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ]'.

**Step 5:**  
Set up your Wireless.

The screenshot shows the 'Setup Wizard - Wireless settings' window. It has the same title bar and main menu as the previous screen. The wizard progress bar shows 'Wireless' as the current step. The 'Wireless settings' section has two options: 'Enable' (selected) and 'Disable'. Below 'Enable' are two fields: 'Network ID (SSID)' with a dropdown set to 'default', and 'Channel' with a dropdown set to '11'. The left sidebar lists 'Wireless Module', 'Network ID (SSID)', and 'Channel'. At the bottom, there are '< Back' and 'Next >' buttons, and a progress path: '[ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ]'.

Set up your Authentication and  
Encryption.

The screenshot shows the 'Setup Wizard - Wireless settings' window, specifically the 'Authentication' and 'Encryption' section. It has the same title bar and main menu. The wizard progress bar shows 'Wireless' as the current step. The 'Authentication' section has a dropdown set to 'Auto'. The 'Encryption' section has four radio buttons: 'WEP Key 1' (selected), 'WEP Key 2', 'WEP Key 3', and 'WEP Key 4'. To the right of each radio button is a dropdown set to 'HEX' and a text input field containing '1234567890'. The left sidebar lists 'Authentication' and 'Encryption'. At the bottom, there are '< Back' and 'Next >' buttons, and a progress path: '[ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ]'.

Step 6:  
Then click Apply Setting.  
And then the device will reboot.

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR'S MAIN MENU Status Wizard Advanced Logout

Setup Wizard - Summary [EXIT]

Please confirm the information below

[ WAN Setting ]	
WAN Type	3G
APN	internet
PIN Code	-
Dialed Number	*99#
Username	guest
Password	*****

[ Wireless Setting ]	
Wireless	Enable
SSID	default12345
Channel	11
Authentication	Auto (Open/Shared)
Encryption	None

☐ Do you want to proceed the network testing?

< Back [ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ] Apply Settings

Step 7:  
Click Finish to complete it.

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR'S MAIN MENU Status Wizard Advanced Logout

Setup Wizard - Apply settings [EXIT]

**Configuration is Completed.**

Please click "Finish" to back to Status page.

< Back [ Start > Password > Time > LAN/WAN > Wireless > Summary > Finish! ] Finish

## 3.2 Advanced Setting

### 3.2.1 Basic Setting

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR's MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

- Network Setup
  - Configure LAN IP, and select WAN type.
- DHCP Server
  - The settings include Host IP, Subnet Mask, Gateway, DNS, and WINS configurations.
- Wireless
  - Wireless settings allow you to configure the wireless configuration items.
- Change Password
  - Allow you to change system password.

#### 1. Network Setup

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR's MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

- Network Setup
- DHCP Server
- Wireless
- Change Password

Item	Setting
LAN IP Address	192.168.123.254
Subnet Mask	255.255.255.0

Internet Setup [HELP]

WAN Interface	Ethernet WAN
WAN Type	Wireless WAN Ethernet WAN

1. **LAN IP Address:** the local IP address of this device. The computers on your network must use the LAN IP address of your product as their Default Router. You can change it if necessary.
2. **Subnet Mask:** insert **255.255.255.0**
3. **WAN Interface:** Select Ethernet WAN or Wireless WAN to continue.

▶ WAN Type	Static IP Address ▼
▶ Activate WWAN for Auto-Failover	Static IP Address Dynamic IP Address PPP over Ethernet PPTP L2TP
▶ WAN IP Address	ve: <input type="text"/>

4. **WAN Type:** WAN connection type of your ISP. You can click WAN Type Combo button to choose a correct one from the following options:

A. Static IP Address:

**WiFi HSPA Gateway (R0.03a3)** English ▼

---

ADMINISTRATOR's MAIN MENU    Status    Wizard    Advanced    ▶ Logout

---

**BASIC SETTING**    FORWARDING RULES    SECURITY SETTING    ADVANCED SETTING    SMS    TOOLBOX

---

- Network Setup
- DHCP Server
- Wireless
- Change Password

LAN Setup	
Item	Setting
▶ LAN IP Address	<input type="text" value="192.168.123.254"/>
▶ Subnet Mask	<input type="text" value="255.255.255.0"/>

[ HELP ]

Internet Setup	
▶ WAN Interface	Ethernet WAN ▼
▶ WAN Type	Static IP Address ▼
▶ Activate WWAN for Auto-Failover	<input type="checkbox"/> Enable Remote Host for keep alive: <input type="text"/>
▶ WAN IP Address	<input type="text"/>
▶ WAN Subnet Mask	<input type="text"/>
▶ WAN Gateway	<input type="text"/>
▶ Primary DNS	<input type="text"/>
▶ Secondary DNS	<input type="text"/>
▶ NAT disable	<input type="checkbox"/> Enable

WAN IP Address, Subnet Mask, Router, Primary and Secondary DNS: enter the proper setting provided by your ISP.



## B. Dynamic IP Address:

The screenshot shows the configuration page for a WiFi HSPA Gateway (R0.03a3). The interface includes a top navigation bar with 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary menu with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. The left sidebar lists 'Network Setup', 'DHCP Server', 'Wireless', and 'Change Password'. The main content area is divided into two sections: 'LAN Setup' and 'Internet Setup'. The 'LAN Setup' section contains a table with 'Item' and 'Setting' columns, showing 'LAN IP Address' as 192.168.123.254 and 'Subnet Mask' as 255.255.255.0. The 'Internet Setup' section contains a table with 'Item' and 'Setting' columns, showing 'WAN Interface' as Ethernet WAN, 'WAN Type' as Dynamic IP Address, 'Activate WWAN for Auto-Failover' as disabled, 'Host Name' as optional, 'ISP registered MAC Address' as Clone, 'Connection Control' as Connect-on-Demand, and 'NAT disable' as disabled. At the bottom of the 'Internet Setup' section are 'Save' and 'Undo' buttons.

Item	Setting
LAN IP Address	192.168.123.254
Subnet Mask	255.255.255.0

Item	Setting
WAN Interface	Ethernet WAN
WAN Type	Dynamic IP Address
Activate WWAN for Auto-Failover	<input type="checkbox"/> Enable Remote Host for keep alive:
Host Name	(optional)
ISP registered MAC Address	Clone
Connection Control	Connect-on-Demand
NAT disable	<input type="checkbox"/> Enable

Save Undo

1. Active WWAN for Auto-Failover: The WAN type will be change to wireless-WAN automatically, if the wired-WAN is defunct.
2. Host Name: optional, required by some ISPs, for example, @Home.
3. ISP register MAC address: You can change the WAN port MAC address, it is your ISP assigned to you.
4. Connection Control: There are 3 modes to select:
  - Connect-on-demand:** The device will link up with ISP when the clients send outgoing packets.
  - Auto Reconnect (Always-on):** The device will link with ISP until the connection is established.
  - Manually:** The device will not make the link until someone clicks the connect-button in the Status-page.
5. NAT disable: the option bridges data form WAN port to LAN port.

## C. PPP over Ethernet

The screenshot shows the 'Internet Setup' configuration page of a 'WiFi HSPA Gateway (R0.03a3)'. The interface includes a top navigation bar with 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary menu with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. A left sidebar lists 'Network Setup', 'DHCP Server', 'Wireless', and 'Change Password'. The main content area is titled 'Internet Setup' and contains a table of settings.

Item	Setting
LAN IP Address	192.168.123.254
Subnet Mask	255.255.255.0
<b>Internet Setup</b> [HELP]	
WAN Interface	Ethernet WAN
WAN Type	PPP over Ethernet
Activate WWAN for Auto-Failover	<input type="checkbox"/> Enable Remote Host for keep alive:
PPPoE Account	
PPPoE Password	
Primary DNS	
Secondary DNS	
Connection Control	Connect-on-Demand
Maximum Idle Time	600 seconds
PPPoE Service Name	(optional)
Assigned IP Address	(optional)
MTU	0 (0 is auto)
NAT disable	<input type="checkbox"/> Enable

At the bottom of the settings table are 'Save' and 'Undo' buttons.

1. Active WWAN for Auto-Failover: The WAN type will be change to wireless-WAN automatically, if the wired-WAN is defunct.
2. PPPoE Account and Password: the account and password your ISP assigned to you. For security, this field appears blank. If you don't want to change the password, leave it empty.
3. Primary DNS/ Secondary DNS: This feature allows you to assign a Primary/Secondary DNS Server, contact to your ISP to get it.
4. Connection Control: There are 3 modes to select:

**Connect-on-demand:** The device will link up with ISP when the clients send outgoing packets.

**Auto Reconnect (Always-on):** The device will link with ISP until the connection is established.

**Manually:** The device will not make the link until someone clicks the connect-button in the Status-page.

5. Maximum Idle Time: the amount of time of inactivity before disconnecting your PPPoE session. Set it to zero or enable "Auto-reconnect" to disable this feature.
6. PPPoE Service Name: optional. Input the service name if your ISP requires it. Otherwise, leave it blank.
7. Assigned IP address: Optional, Input the IP address you want. Usually, leave it blank.
8. Maximum Transmission Unit (MTU): Most ISP offers MTU value to users. The default MTU value is 0(auto).
9. NAT disable: the option bridges data form WAN port to LAN port

#### D. PPTP

The screenshot shows the configuration interface for a WiFi HSPA Gateway (R0.03a3). The interface is in English and has a top navigation bar with links for Administrator's Main Menu, Status, Wizard, Advanced, and Logout. Below this is a secondary navigation bar with tabs for Basic Setting, Forwarding Rules, Security Setting, Advanced Setting, SMS, and Toolbox. The left sidebar contains a tree view with options: Network Setup, DHCP Server, Wireless, and Change Password. The main content area is titled 'LAN Setup' and contains a table with two columns: 'Item' and 'Setting'.

Item	Setting
LAN IP Address	192.168.123.254
Subnet Mask	255.255.255.0
<b>Internet Setup</b> [HELP]	
WAN Interface	Ethernet WAN
WAN Type	PPTP
Activate WWAN for Auto-Failover	<input type="checkbox"/> Enable Remote Host for keep alive:
IP Mode	Dynamic IP Address
My IP Address	
My Subnet Mask	
Gateway IP	
Server IP Address/Name	
PPTP Account	
PPTP Password	
Connection ID	(optional)
Maximum Idle Time	600 seconds
Connection Control	Connect-on-Demand
MTU	0 (0 is auto)

At the bottom of the form are 'Save' and 'Undo' buttons.

First, please check your ISP assigned and select the IP Mode - Static IP Address or Dynamic IP Address. For example: Use Static, the private IP address, subnet mask and Router are your ISP assigned to you.

1. Active WWAN for Auto-Failover: The WAN type will be change to wireless-WAN

automatically, if the wired-WAN is defunct.

2. My IP Address, My Subnet Mask and WAN Router IP: the private IP address, subnet mask and Router IP your ISP assigned to you.
3. Server IP Address/Name: the IP address or URL of the PPTP server.
4. PPTP Account and Password: the account and password your ISP assigned to you. If you don't want to change the password, keep it empty.
5. Connection ID: optional. Input the connection ID if your ISP requires it.
6. Maximum Idle Time: the time of no activity to disconnect your PPTP session. Set it to zero or enable "Auto-reconnect" to disable this feature. If Auto-reconnect is enabled, this product will connect with ISP automatically, after system is restarted or connection is dropped.
7. Connection Control: There are 3 modes to select:  
Connect-on-demand: The device will link up with ISP when the clients send outgoing packets.  
Auto Reconnect (Always-on): The device will link with ISP until the connection is established. Manually: The device will not make the link until someone clicks the connect-button in the Status-page.
8. Maximum Transmission Unit (MTU): Most ISP offers MTU value to users. The default MTU value is 0(auto).

## E. L2TP

The screenshot shows the configuration interface for a WiFi HSPA Gateway (R0.03a3). The interface is in English and displays the 'ADMINISTRATOR's MAIN MENU' with options: Status, Wizard, Advanced, and Logout. The 'BASIC SETTING' tab is selected, showing a sidebar with 'Network Setup', 'DHCP Server', 'Wireless', and 'Change Password'. The main content area is titled 'LAN Setup' and contains a table with two sections: 'LAN Setup' and 'Internet Setup'.

Item	Setting
LAN IP Address	192.168.123.254
Subnet Mask	255.255.255.0
<b>Internet Setup</b> [HELP]	
WAN Interface	Ethernet WAN
WAN Type	L2TP
Activate WWAN for Auto-Failover	<input type="checkbox"/> Enable Remote Host for keep alive:
IP Mode	Dynamic IP Address
IP Address	
Subnet Mask	
WAN Gateway IP	
Server IP Address/Name	
L2TP Account	
L2TP Password	
Maximum Idle Time	600 seconds
Connection Control	Connect-on-Demand
MTU	0 (0 is auto)

At the bottom of the form are 'Save' and 'Undo' buttons.

First, please check your ISP assigned and select the IP Mode - Static IP Address or Dynamic IP Address. For example: Use Static, the private IP address, subnet mask and Router are your ISP assigned to you.

1. Activate WWAN for Auto-Failover: The WAN type will be change to wireless-WAN automatically, if the wired-WAN is defunct.
2. IP Address, Subnet Mask and WAN Router IP: the private IP address, subnet mask and Router IP your ISP assigned to you.
3. Server IP Address/Name: the IP address or URL of the PPTP server.
4. L2TP Account and Password: the account and password your ISP assigned to you. If you don't want to change the password, keep it empty.
5. Maximum Idle Time: the time of no activity to disconnect your L2TP session. Set it to zero or enable "Auto-reconnect" to disable this feature. If Auto-reconnect is enabled, this product will connect with ISP automatically, after system is restarted or connection is

dropped.

6. Connection Control: There are 3 modes to select:

Connect-on-demand: The device will link up with ISP when the clients send outgoing packets.

Auto Reconnect (Always-on): The device will link with ISP until the connection is established.

Manually: The device will not make the link until someone clicks the connect-button in the Status-page.

7. Maximum Transmission Unit (MTU): Most ISP offers MTU value to users. The default MTU value is 0(auto).

Or select Wireless WAN for 3G Setting.

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR's MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

- Network Setup
- DHCP Server
- Wireless
- Change Password

Item	Setting
LAN IP Address	192.168.123.254
Subnet Mask	255.255.255.0

Internet Setup [ HELP ]

WAN Interface	Wireless WAN
WAN Type	Wireless WAN Ethernet WAN

## F. 3G

English v

WiFi HSPA Gateway (R0.03a3)

ADMINISTRATOR's MAIN MENU
Status
Wizard
Advanced
Logout

BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
SMS
TOOLBOX

- Network Setup
- DHCP Server
- Wireless
- Change Password

LAN Setup

[ HELP ]

Item	Setting
▶ LAN IP Address	<input type="text" value="192.168.123.254"/>
▶ Subnet Mask	<input type="text" value="255.255.255.0"/>
<div style="border-bottom: 1px solid black; padding-bottom: 5px;"> <div style="float: left;">Internet Setup</div> <div style="float: right;">[ HELP ]</div> </div>	
▶ WAN Interface	<span style="border: 1px solid black; padding: 0 10px;">Wireless WAN v</span>
▶ WAN Type	<span style="border: 1px solid black; padding: 0 10px;">3G v</span>
▶ Dial-Up Profile	<input type="radio"/> Auto-Detection <input checked="" type="radio"/> Manual
▶ Country	<span style="border: 1px solid black; padding: 0 10px;">Taiwan v</span>
▶ Telecom	<span style="border: 1px solid black; padding: 0 10px;">Chunghwa Telecom v</span>
▶ 3G Network	<span style="border: 1px solid black; padding: 0 10px;">WCDMA/HSPA v</span>
▶ APN	<input type="text" value="internet"/> (optional)
▶ PIN Code	<input type="text"/> (optional)
▶ Dialed Number	<input type="text" value="*99#"/>
▶ Account	<input type="text" value="guest"/> (optional)
▶ Password	<input type="password" value="••••"/> (optional)
▶ Authentication	<input checked="" type="radio"/> Auto <input type="radio"/> PAP <input type="radio"/> CHAP
▶ Primary DNS	<input type="text"/> (optional)
▶ Secondary DNS	<input type="text"/> (optional)
▶ Prefer Service Mode	<span style="border: 1px solid black; padding: 0 10px;">Auto Mode v</span>
▶ Connection Control	<span style="border: 1px solid black; padding: 0 10px;">Auto Reconnect (always-on) v</span>
▶ Allowed Connection Time	<input checked="" type="radio"/> Always <input type="radio"/> By Schedule
▶ Keep Alive	<input checked="" type="radio"/> Disable <input type="radio"/> LCP Echo Request <div style="margin-left: 20px;">             ▶ Interval <input type="text" value="10"/> seconds              ▶ Max. Failure Time <input type="text" value="3"/> times           </div> <input type="radio"/> Ping Remote Host <div style="margin-left: 20px;">             ▶ Host IP <input type="text"/>              ▶ Interval <input type="text" value="60"/> seconds           </div>
▶ Roaming	<input type="checkbox"/> Enable

Save
Undo

For 3G WAN Networking. The WAN fields may not be necessary for your connection. The information on this page will only be used when your service provider requires you to enter a User Name and Password to connect with the 3G network.

Please refer to your documentation or service provider for additional information.

1. Dial-Up Profile: select auto or manual to continue.
2. Country: select your country.
3. Telecom: select your telecom.
4. 3G Network: select the 3G Network.
5. APN: Enter the APN for your PC card here.(Optional)
6. Pin Code: Enter the Pin Code for your SIM card(Optional)
7. Dial-Number: This field should not be altered except when required by your service provider.
8. Account: Enter the new User Name for your PC card here, you can contact to your ISP to get it.
9. Password: Enter the new Password for your PC card here, you can contact to your ISP to get it.
10. Authentication: Choose your authentication.
11. Primary DNS: This feature allows you to assign a Primary DNS Server, contact to your ISP to get it.
12. Secondary DNS: This feature allows you to assign a Secondary DNS Server, you can contact to your ISP to get it.
13. Connection Control: select your connection control
14. Keep Alive: you can diagnose your connection by it.



## 2. DHCP Server

Item	Setting
DHCP Server	<input type="radio"/> Disable <input checked="" type="radio"/> Enable
IP Pool Starting Address	<input type="text" value="100"/>
IP Pool Ending Address	<input type="text" value="200"/>
Lease Time	<input type="text" value="86400"/> Seconds
Domain Name	<input type="text"/>

Press “More>>”,

1. **DHCP Server:** Choose either **Disable** or **Enable**
2. **Lease Time:** DHCP lease time to the DHCP client
3. **IP Pool Starting/Ending Address:** Whenever there is a request, the DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting / ending address of the IP address pool
4. **Domain Name:** Optional, this information will be passed to the client
5. **Primary DNS/Secondary DNS:** Optional, This feature allows you to assign a DNS Servers
6. **Primary WINS/Secondary WINS:** Optional, this feature allows you to assign a WINS Servers
7. **Router:** Optional, Router Address would be the IP address of an alternate Router.  
This function enables you to assign another Router to your PC, when DHCP server offers an IP to your PC.

**Click on “Save” to store your setting or click “Undo” to give up**

## DHCP Clients List

The list of DHCP clients shows here.

The screenshot displays the administrator interface of a WiFi HSPA Gateway (R0.03a3). The interface includes a top navigation bar with 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary navigation bar with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. The left sidebar contains a tree view with 'Network Setup', 'DHCP Server', 'Wireless', and 'Change Password'. The main content area is titled 'DHCP Clients List' and contains a table with the following data:

IP Address	Host Name	MAC Address	Type	Lease Time	Select
192.168.123.101	tstlin-PC	00-22-FB-68-2F-68	Wireless	23:59:37	<input type="checkbox"/>

Below the table are four buttons: 'Delete', 'Back', 'Refresh', and 'Fixed Mapping'.

## DHCP Fixed Mapping

The DHCP Server will reserve the special IP for special MAC address, shows below.

WiFi HSPA Gateway (R0.03a3)

English

ADMINISTRATOR's MAIN MENU

Status

Wizard

Advanced

Logout

BASIC SETTING

FORWARDING RULES

SECURITY SETTING

ADVANCED SETTING

SMS

TOOLBOX

• Network Setup

• DHCP Server

• Wireless

• Change Password

Fixed Mapping

[ HELP ]

DHCP clients

-- select one --

Copy to

ID

--

ID	MAC Address	IP Address	Enable
1	00:22:FB:68:2F:68	192.168.123.101	<input checked="" type="checkbox"/>
2			<input type="checkbox"/>
3			<input type="checkbox"/>
4			<input type="checkbox"/>
5			<input type="checkbox"/>
6			<input type="checkbox"/>
7			<input type="checkbox"/>
8			<input type="checkbox"/>
9			<input type="checkbox"/>
10			<input type="checkbox"/>

<< Previous

Next >>

Save

Undo

Back

### 3. Wireless Settings

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR's MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

Network Setup  
DHCP Server  
Wireless  
Change Password

Wireless Setting [HELP]

Item	Setting
Wireless Module	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Network ID(SSID)	default
SSID Broadcast	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Channel	11
Wireless Mode	B/G/N mixed
Authentication	Auto
Encryption	None

Save Undo WDS Setting...  
WPS Setup... Wireless Client List...

Wireless settings allow you to set the wireless configuration items.

1. **Wireless Module:** The user can enable or disable wireless function
2. **Network ID(SSID):** Network ID is used for identifying the Wireless LAN (WLAN). Client stations can roam freely over this product and other Access Points that have the same Network ID. (The factory setting is "default")
3. **SSID Broadcast:** The router will broadcast beacons that have some information, including ssid so that wireless clients can know how many AP devices by scanning function in the network. Therefore, this function is disabled; the wireless clients can not find the device from beacons.
4. **Channel:** The radio channel number. The permissible channels depend on the Regulatory Domain.  
The factory setting is channel 11.
5. **Wireless Mode:** Choose B/G Mixed, B only, G only, N only, G/N Mixed or B/G/N mixed. The factory default setting is B/G/N mixed.
6. **Authentication mode:** You may select from nine kinds of authentication to secure your wireless network: Open, Shared, Auto, WPA-PSK, WPA, WPA2-PSK, WPA2, WPA-PSK/WPA2-PSK, WPA/WPA2.

#### Open

Open system authentication simply consists of two communications. The first is an authentication request by the client that contains the station ID (typically the MAC

address). This is followed by an authentication response from the AP/router containing a success or failure message. An example of when a failure may occur is if the client's MAC address is explicitly excluded in the AP/router configuration.

### **Shared**

Shared key authentication relies on the fact that both stations taking part in the authentication process have the same "shared" key or passphrase. The shared key is manually set on both the client station and the AP/router. Three types of shared key authentication are available today for home or small office WLAN environments.

### **Auto**

The AP will Select the Open or Shared by the client's request automatically.

### **WPA-PSK**

Select Encryption and Pre-share Key Mode

If you select HEX, you have to fill in 64 hexadecimal (0, 1, 2...8, 9, A, B...F) digits.

If you select ASCII, the length of pre-share key is from 8 to 63.

Fill in the key, Ex 12345678

### **WPA**

Check Box was used to switch the function of the WPA. When the WPA function is enabled, the Wireless user must **authenticate** to this router first to use the Network service. RADIUS Server IP address or the 802.1X server's domain-name.

Select Encryption and RADIUS Shared Key

If you select HEX, you have to fill in 64 hexadecimal (0, 1, 2...8, 9, A, B...F) digits

If you select ASCII, the length of pre-share key is from 8 to 63.

Key value shared by the RADIUS server and this router. This key value is consistent with the key value in the RADIUS server.

### **WPA-PSK2**

WPA-PSK2 user AES and TKIP for Same the encryption, the others are same the WPA-PSK.

### **WPA2**

WPA2 add uses AES and TKIP for encryption, the others are same the WPA.

### **WPA-PSK/WPA-PSK2**

Another encryption options for WPA-PSK-TKIP and WPA-PSK2-AES, the others are same

the WPA-PSK.

## WPA/WPA2

Another encryption options for WPA-TKIP and WPA2-AES, the others are same the WPA.

## WDS(Wireless Distribution System) Setting

WDS operation as defined by the IEEE802.11 standard has been made available. Using WDS it is possible to wirelessly connect Access Points, and in doing so extend a wired infrastructure to locations where cabling is not possible or inefficient to implement.

The screenshot shows the 'WDS Setting' page in the 'WiFi HSPA Gateway (R0.03a3)' interface. The page has a sidebar on the left with 'Basic Setting' selected. The main area contains a table with the following settings:

Item	Setting
Wireless Bridging	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Remote AP MAC 1	<input type="text"/>
Remote AP MAC 2	<input type="text"/>
Remote AP MAC 3	<input type="text"/>
Remote AP MAC 4	<input type="text"/>
Encryption type	None <input type="button" value="v"/>

At the bottom of the table are three buttons: 'Save', 'Undo', and 'Back'.

## WPS (Wi-Fi Protection Setup)

WPS is Wi-Fi Protection Setup which is similar to WCN-NET and offers safe and easy way in Wireless Connection.

Default value is "enable"



#### 4. Change Password

The screenshot shows the administrator interface of a WiFi HSPA Gateway (R0.03a3). The interface has a top navigation bar with 'ADMINISTRATOR's MAIN MENU' and links for 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary menu with 'BASIC SETTING' (selected), 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. On the left, a sidebar lists 'Network Setup', 'DHCP Server', 'Wireless', and 'Change Password'. The main content area displays the 'Change Password' form, which includes a table with three rows: 'Old Password', 'New Password', and 'Reconfirm', each with a corresponding text input field. At the bottom of the form are 'Save' and 'Undo' buttons.

Item	Setting
▶ Old Password	<input type="text"/>
▶ New Password	<input type="text"/>
▶ Reconfirm	<input type="text"/>

You can change Password here. We **strongly** recommend you to change the system password for security reason.

Click on “Save” to store your setting or “Undo” to give up



### 3.2.2 Forwarding Rules

The screenshot shows the 'Forwarding Rules' page in the WiFi HSPA Gateway (R0.03a3) administrator interface. The left sidebar contains a menu with 'Virtual Server', 'Special AP', and 'Miscellaneous'. The main content area is titled 'Forwarding Rules' and contains a list of three categories:

- Virtual Server**
  - Allows others to access WWW, FTP, and other services on your LAN.
- Special Application**
  - This configuration allows some applications to connect, and work with the NAT router.
- Miscellaneous**
  - IP Address of DMZ Host: Allows a computer to be exposed to unrestricted 2-way communication. Note that, this feature should be used only when needed.
  - UPnP Setting: If you enable UPnP function, the router will work with UPnP devices/softwares.

### Virtual Server

The screenshot shows the 'Virtual Server' configuration page in the WiFi HSPA Gateway (R0.03a3) administrator interface. The left sidebar contains a menu with 'Virtual Server', 'Special AP', and 'Miscellaneous'. The main content area is titled 'Virtual Server' and contains a table for configuring virtual servers. At the top of the table, there is a dropdown menu for 'Well known services' (set to '-- select one --') and a 'Copy to ID' button. The table has five columns: ID, Service Ports, Server IP, Enable, and Use Rule#. There are 10 rows in the table, each with a unique ID and a 'Use Rule#' dropdown menu set to '(0) Always'. At the bottom of the table, there are 'Save' and 'Undo' buttons.

ID	Service Ports	Server IP	Enable	Use Rule#
1	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
3	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
4	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
5	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
6	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
7	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
8	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
9	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always
10	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	(0) Always

This product's NAT firewall filters out unrecognized packets to protect your Intranet, so all hosts behind this product are invisible to the outside world. If you wish, you can make some of them

accessible by enabling the Virtual Server Mapping.

A virtual server is defined as a **Service Port**, and all requests to this port will be redirected to the computer specified by the **Server IP**. **Virtual Server** can work with **Scheduling Rules**, and give user more flexibility on Access control. For Detail, please refer to **Scheduling Rule**.

For example, if you have an FTP server (port 21) at 192.168.123.1, a Web server (port 80) at 192.168.123.2, and a VPN server at 192.168.123.6, then you need to specify the following virtual server mapping table:

Service Port	Server IP	Enable
21	192.168.123.1	V
80	192.168.123.2	V
1723	192.168.123.6	V

Click on “Save” to store your setting or “Undo” to give up

## Special AP

The screenshot shows the 'Special Applications' configuration page in the 'ADMINISTRATOR's MAIN MENU'. The page has a sidebar with 'Virtual Server', 'Special AP', and 'Miscellaneous' options. The main content area is titled 'Special Applications' and includes a 'Popular applications' dropdown menu, a 'Copy to' button, and an 'ID' dropdown. Below this is a table with 8 rows, each with columns for 'ID', 'Trigger', 'Incoming Ports', and 'Enable'. The 'Enable' column contains checkboxes. At the bottom of the table are 'Save' and 'Undo' buttons.

ID	Trigger	Incoming Ports	Enable
1	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
4	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
5	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
6	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
7	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
8	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Some applications require multiple connections, like Internet games, Video conferencing, Internet telephony, etc. Because of the firewall function, these applications cannot work with a pure NAT

router. **The Special Applications** feature allows some of these applications to work with this product. If the mechanism of Special Applications fails to make an application work, try setting your computer as the DMZ host instead.

1. **Trigger:** the outbound port number issued by the application.
2. **Incoming Ports:** when the trigger packet is detected, the inbound packets sent to the specified port numbers are allowed to pass through the firewall.

This product provides some predefined settings.

Select your application and Click “**Copy to**” to add the predefined setting to your list.

**Click on “Save” to store your setting or” Undo” to give up**

## Miscellaneous

The screenshot shows the 'Miscellaneous Items' configuration page in the WiFi HSPA Gateway (R0.03a3) web interface. The page has a sidebar with 'Virtual Server', 'Special AP', and 'Miscellaneous' (selected). The main area contains a table with columns 'Item', 'Setting', and 'Enable'. There are two rows: 'IP Address of DMZ Host' with an empty text box and 'UPnP setting' with a checked checkbox. At the bottom are 'Save' and 'Undo' buttons.

Item	Setting	Enable
▶ IP Address of DMZ Host	<input type="text"/>	<input type="checkbox"/>
▶ UPnP setting		<input checked="" type="checkbox"/>

### 1. IP Address of DMZ Host

DMZ (Demilitarized Zone) Host is a host without the protection of firewall. It allows a computer to be exposed to unrestricted 2-way communication for Internet games, Video conferencing, Internet telephony and other special applications.

### 2. UPnP Setting

The device also supports this function. If the OS supports this function enable it, like Windows XP. When the user gets IP from Device and will see icon as below:

**Click on “Save” to store your setting or “Undo” to give up**

### 3.2.3 Security Setting

The screenshot displays the administrator interface of a WiFi HSPA Gateway (R0.03a3). The interface is in English and shows the 'ADMINISTRATOR's MAIN MENU' with options for Status, Wizard, Advanced, and Logout. The 'SECURITY SETTING' tab is selected, and the left sidebar lists various settings including Status, Packet Filters, Domain Filters, URL Blocking, MAC Control, and Miscellaneous. The main content area, titled 'Security Setting', provides detailed information about the following features:

- **Packet Filters**
  - Allows you to control access to a network by analyzing the incoming and outgoing packets and letting them pass or halting them based on the IP address of the source and destination.
- **Domain Filters**
  - Let you prevent users under this device from accessing specific URLs.
- **URL Blocking**
  - URL Blocking will block LAN computers to connect to pre-defined websites.
- **MAC Address Control**
  - MAC Address Control allows you to assign different access right for different users.
- **Miscellaneous**
  - Remote Administrator Host: In general, only Intranet user can browse the built-in web pages to perform administration task. This feature enables you to perform administration task from remote host.
  - Administrator Time-out: The amount of time of inactivity before the device will automatically close the Administrator session. Set this to zero to disable it.
  - Discard PING from WAN side: When this feature is enabled, hosts on the WAN cannot ping the Device.

## Packet Filters

The screenshot shows the 'WiFi HSPA Gateway (R0.03a3)' configuration page. The 'SECURITY SETTING' tab is selected. Under 'Outbound Packet Filter', the 'Enable' checkbox is checked. The policy is set to 'Allow all to pass except those match the following rules.' Below this is a table with 8 rows for defining rules. Each row has columns for ID, Source IP, Destination IP : Ports, Enable, and Use rule#. All 'Enable' checkboxes are unchecked, and all 'Use rule#' dropdowns are set to '(0) Always'. At the bottom are buttons for 'Save', 'Undo', 'Inbound Filter...', and 'MAC Level...'.

ID	Source IP	Destination IP : Ports	Enable	Use rule#
1			<input type="checkbox"/>	(0) Always
2			<input type="checkbox"/>	(0) Always
3			<input type="checkbox"/>	(0) Always
4			<input type="checkbox"/>	(0) Always
5			<input type="checkbox"/>	(0) Always
6			<input type="checkbox"/>	(0) Always
7			<input type="checkbox"/>	(0) Always
8			<input type="checkbox"/>	(0) Always

Packet Filter includes both outbound filter and inbound filter. And they have same way to setting. Packet Filter enables you to control what packets are allowed to pass the router. Outbound filter applies on all outbound packets. However, inbound filter applies on packets that destined to Virtual Servers or DMZ host only. You can select one of the two filtering policies:

1. Allow all to pass except those match the specified rules
2. Deny all to pass except those match the specified rules

You can specify 8 rules for each direction: inbound or outbound. For each rule, you can define the following:

- Source IP address
- Source port
- Destination IP address
- Destination port
- Protocol: TCP or UDP or both.
- Use Rule#

For source or destination IP address, you can define a single IP address (4.3.2.1) or a range of IP addresses (4.3.2.1-4.3.2.254). An empty implies all IP addresses.

For source or destination port, you can define a single port (80) or a range of ports (1000-1999). Add prefix "T" or "U" to specify TCP or UDP protocol. For example, T80, U53, U2000-2999, No prefix indicates both TCP and UDP are defined. An empty implies all port addresses. Packet Filter can work with **Scheduling Rules**, and give user more flexibility on Access control. For Detail, please refer to **Scheduling Rule**.

Each rule can be enabled or disabled individually.

**Click on “Save” to store your setting or “Undo” to give up**

## Domain Filters

**WiFi HSPA Gateway (R0.03a3)** English

---

ADMINISTRATOR's MAIN MENU   Status   Wizard   Advanced   ▶ Logout

---

BASIC SETTING   FORWARDING RULES   **SECURITY SETTING**   ADVANCED SETTING   SMS   TOOLBOX

---

- Status
- Packet Filters
- Domain Filters
- URL Blocking
- MAC Control
- Miscellaneous

**Domain Filter** [ HELP ]

Item	Setting
▶ Domain Filter	<input type="checkbox"/> Enable
▶ Log DNS Query	<input type="checkbox"/> Enable
▶ Privilege IP Addresses Range	From <input type="text"/> To <input type="text"/>

ID	Domain Suffix	Action	Enable
1	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
2	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
3	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
4	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
5	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
6	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
7	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
8	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
9	<input type="text"/>	<input type="checkbox"/> Drop <input type="checkbox"/> Log	<input type="checkbox"/>
10	* (all others)	<input type="checkbox"/> Drop <input type="checkbox"/> Log	-

### 1. Domain Filter

Let you prevent users under this device from accessing specific URLs.

### 2. Domain Filter Enable

Check if you want to enable Domain Filter.

### 3. Log DNS Query

Check if you want to log the action when someone accesses the specific URLs.

### 4. Privilege IP Address Range

Setting a group of hosts and privilege these hosts to access network without restriction.

### 5. Domain Suffix

A suffix of URL can be restricted, for example, ".com", "xxx.com".

### 6. Action

When someone is accessing the URL met the domain-suffix, what kind of action you want.  
Check drop to block the access. Check "log" to log these access.

### 7. Enable

Check to enable each rule.

**Click on "Save" to store your setting or "Undo" to give up**



## URL Blocking

The screenshot shows the 'URL Blocking' configuration page within the 'Wi-Fi HSPA Gateway (R0.03a3)' interface. The page has a top navigation bar with 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary menu with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING' (selected), 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. On the left is a sidebar with links to 'Status', 'Packet Filters', 'Domain Filters', 'URL Blocking' (selected), 'MAC Control', and 'Miscellaneous'. The main content area is titled 'URL Blocking' with a '[HELP]' link. It contains a table with columns 'Item' and 'Setting'. Under 'Item', there is a sub-section 'URL Blocking' with an 'Enable' checkbox. Below this is a table with 10 rows, each with an 'ID' (1-10), a 'URL' input field, and an 'Enable' checkbox. At the bottom of the table are 'Save' and 'Undo' buttons.

ID	URL	Enable
1	<input type="text"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="checkbox"/>
4	<input type="text"/>	<input type="checkbox"/>
5	<input type="text"/>	<input type="checkbox"/>
6	<input type="text"/>	<input type="checkbox"/>
7	<input type="text"/>	<input type="checkbox"/>
8	<input type="text"/>	<input type="checkbox"/>
9	<input type="text"/>	<input type="checkbox"/>
10	<input type="text"/>	<input type="checkbox"/>

Save Undo

**URL Blocking** will block LAN computers to connect with pre-define Websites. The major difference between "Domain filter" and "URL Blocking" is Domain filter require user to input suffix (like .com or .org, etc), while URL Blocking require user to input a keyword only. In other words, Domain filter can block specific website, while URL Blocking can block hundreds of websites by simply a **keyword**.

### 1. URL Blocking Enable

Check if you want to enable URL Blocking.

### 2. URL

If any part of the Website's URL matches the pre-defined word, the connection will be blocked.

For example, you can use pre-defined word "sex" to block all websites if their URLs contain pre-defined word "sex".

### 3. Enable

Check to enable each rule.



Click on “Save” to store your setting or “Undo” to give up

## MAC Control

The screenshot shows the 'MAC Address Control' configuration page in the 'WiFi HSPA Gateway (R0.03a3)' interface. The page has a sidebar with a menu including 'Status', 'Packet Filters', 'Domain Filters', 'URL Blocking', 'MAC Control' (selected), and 'Miscellaneous'. The main content area is titled 'MAC Address Control' and includes a '[ HELP ]' link. It contains three main settings: 'MAC Address Control' (checked), 'Connection control' (unchecked), and 'Association control' (unchecked). Below these are two dropdown menus for 'DHCP clients' and 'ID', with a 'Copy to' button. A table with 4 columns (ID, MAC Address, C, A) and 5 rows (ID 1-5) is shown. The table has input fields for MAC addresses and checkboxes for 'C' and 'A'. At the bottom are navigation buttons: '<< Previous', 'Next >>', 'Save', and 'Undo'.

Item	Setting
MAC Address Control	<input checked="" type="checkbox"/> Enable
Connection control	<input type="checkbox"/> Wireless and wired clients with C checked can connect to this device; and allow unspecified MAC addresses to connect.
Association control	<input type="checkbox"/> Wireless clients with A checked can associate to the wireless LAN; and allow unspecified MAC addresses to associate.

DHCP clients -- select one -- Copy to ID --

ID	MAC Address	C	A
1	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>

<< Previous Next >> Save Undo

MAC Address Control allows you to assign different access right for different users and to assign a specific IP address to a certain MAC address.

### 1. MAC Address Control

Check “Enable” to enable the “MAC Address Control”. All of the settings in this page will take effect only when “Enable” is checked.

### 2. Connection control

Check "Connection control" to enable the controlling of which wired and wireless clients can connect with this device. If a client is denied to connect with this device, it means the client can't access to the Internet either. Choose "allow" or "deny" to allow or deny the clients, whose MAC addresses are not in the "Control table" (please see below), to connect with this

device.

### 3. **Association control**

Check "Association control" to enable the controlling of which wireless client can associate to the wireless LAN. If a client is denied to associate to the wireless LAN, it means the client can't send or receive any data via this device. Choose "allow" or "deny" to allow or deny the clients, whose MAC addresses are not in the "Control table", to associate to the wireless LAN

**Click “Save” to store your setting or “Undo” to give up**

## Miscellaneous

The screenshot shows the 'Miscellaneous Items' configuration page in the WiFi HSPA Gateway (R0.03a3) web interface. The interface has a top navigation bar with 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary navigation bar with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING' (selected), 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. On the left is a sidebar menu with 'Status', 'Packet Filters', 'Domain Filters', 'URL Blocking', 'MAC Control', and 'Miscellaneous' (selected). The main content area displays a table titled 'Miscellaneous Items' with a '[ HELP ]' link. The table has three columns: 'Item', 'Setting', and 'Enable'. It lists four items: 'Administrator Time-out' (300 seconds), 'Remote Administrator Host : Port' (IP/Port), 'Discard PING from WAN side', and 'DoS Attack Detection'. Each item has an 'Enable' checkbox. At the bottom of the table are 'Save' and 'Undo' buttons.

Item	Setting	Enable
▶ Administrator Time-out	300 seconds (0 to disable)	<input type="checkbox"/>
▶ Remote Administrator Host : Port	<input type="text"/> / <input type="text"/> : <input type="text"/>	<input type="checkbox"/>
▶ Discard PING from WAN side		<input type="checkbox"/>
▶ DoS Attack Detection		<input type="checkbox"/>

Save Undo

### 1. Administrator Time-out

The time of no activity to logout automatically, you may set it to zero to disable this feature.

### 2. Remote Administrator Host/Port

In general, only Intranet user can browse the built-in web pages to perform administration task. This feature enables you to perform administration task from remote host. If this feature is enabled, only the specified IP address can perform remote administration. If the specified IP address is 0.0.0.0, any host can connect with this product to perform administration task. You can use subnet mask bits "/nn" notation to specified a group of trusted IP addresses for example, "10.1.2.0/24".

NOTE: When Remote Administration is enabled, the web server port will be shifted to 80. You can change web server port to other port, too.

### 3. Discard PING from WAN side

When this feature is enabled, any host on the WAN cannot ping this product.

### 4. DoS Attack Detection

When this feature is enabled, the router will detect and log the DoS attack comes from the Internet. Currently, the router can detect the following DoS attack: SYN Attack, WinNuke, Port Scan, Ping of Death, Land Attack etc.

**Click on "Save" to store your setting or" Undo" to give up**

### 3.2.4 Advanced Settings

The screenshot displays the 'WiFi HSPA Gateway (R0.03a3)' web interface. At the top, there is a header bar with the title and a language dropdown set to 'English'. Below this is a navigation bar with tabs for 'ADMINISTRATOR'S MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. A secondary navigation bar contains icons and labels for 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING' (which is highlighted), 'SMS', and 'TOOLBOX'.

On the left side, a vertical sidebar lists the following menu items: Status, System Log, Dynamic DNS, QoS, SNMP, Routing, System Time, and Scheduling. The 'ADVANCED SETTING' section is expanded, showing a list of configuration options:

- **System Log**
  - Send system log to a dedicated host or email to specific receipts.
- **Dynamic DNS**
  - To host your server on a changing IP address, you have to use dynamic domain name service (DDNS).
- **QoS Rule**
  - Quality of Service can provide different priority to different users or data flows, or guarantee a certain level of performance.
- **SNMP**
  - Gives a user the capability to remotely manage a computer network by polling and setting terminal values and monitoring network events.
- **Routing**
  - If you have more than one routers and subnets, you may want to enable routing table to allow packets to find proper routing path and allow different subnets to communicate with each other.
- **System Time**
  - Allow you to set device time manually or consult network time from NTP server.
- **Schedule Rule**
  - Apply schedule rules to Packet Filters and Virtual Server.

## System Log

Item	Setting	Enable
▶ IP address for syslogd	<input type="text"/>	<input type="checkbox"/>
▶ Setting of Email alert		<input type="checkbox"/>
• SMTP Server : port	<input type="text"/> : <input type="text"/>	
• SMTP Username	<input type="text"/>	
• SMTP Password	<input type="text"/>	
• E-mail addresses	<input type="text"/>	
• E-mail subject	<input type="text"/>	

This page support two methods to export system logs to specific destination by means of syslog (UDP) and SMTP(TCP). The items you have to setup including:

### IP Address for Sys log

Host IP of destination where sys log will be sent to.

Check **Enable** to enable this function.

### Setting of E-mail Alert

Check if you want to enable Email alert (send syslog via email).

### SMTP Server IP and Port

Input the SMTP server IP and port, which are connected with ':'. If you do not specify port number, the default value is 25.

For example, "mail.your\_url.com" or "192.168.1.100:26".

### SMTP Username and Password

Input a user account and password for the SMTP server.

### E-mail address

The recipients who will receive these logs, you can assign more than 1 recipient, using ';' or ',' to separate these email addresses.

### E-mail Subject

The subject of email alert, this setting is optional.

### View Log...

Reference the section Toolbox/System Info.

**Click on “Save” to store your setting or “Undo” to give up**

## Dynamic DNS

The screenshot shows the 'Dynamic DNS' configuration page in the 'ADVANCED SETTING' section of the 'WiFi HSPA Gateway (R0.03a3)' interface. The page has a sidebar menu on the left with options like Status, System Log, Dynamic DNS, QoS, SNMP, Routing, System Time, and Scheduling. The main content area is titled 'Dynamic DNS' and includes a '[HELP]' link. It contains a table with two columns: 'Item' and 'Setting'. The table has five rows: 'DDNS' with radio buttons for 'Disable' (selected) and 'Enable'; 'Provider' with a dropdown menu showing 'DynDNS.org(Dynamic)'; 'Host Name' with a text input field; 'Username / E-mail' with a text input field; and 'Password / Key' with a text input field. At the bottom of the table are 'Save' and 'Undo' buttons.

Item	Setting
▶ DDNS	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
▶ Provider	DynDNS.org(Dynamic) ▼
▶ Host Name	<input type="text"/>
▶ Username / E-mail	<input type="text"/>
▶ Password / Key	<input type="text"/>

Save Undo

To host your server on a changing IP address, you have to use dynamic domain name service (DDNS).

So that anyone wishing to reach your host only needs to know the name of it. Dynamic DNS will map the name of your host to your current IP address, which changes each time you connect your Internet service provider.

Before you enable **Dynamic DNS**, you need to register an account on one of these Dynamic DNS servers that we list in **provider** field.

To enable **Dynamic DNS** click the check box next to **Enable** in the **DDNS** field.

Next you can enter the appropriate information about your Dynamic DNS Server.

You have to define:

Provider

Host Name

Username/E-mail

Password/Key

You will get this information when you register an account on a Dynamic DNS server.

**Click on “Save” to store your setting or “Undo” to give up**

## QOS

**WiFi HSPA Gateway (R0.03a3)** English

---

**ADMINISTRATOR'S MAIN MENU**    Status    Wizard    Advanced    ▶ Logout

---

BASIC SETTING    FORWARDING RULES    SECURITY SETTING    **ADVANCED SETTING**    SMS    TOOLBOX

---

- Status
- System Log
- Dynamic DNS
- **QoS**
- SNMP
- Routing
- System Time
- Scheduling

**QoS Rule**

Item	Setting				
▶ QoS Control	<input type="checkbox"/> Enable				
▶ Bandwidth of Upstream	<input type="text"/> kbps (Kilobits per second)				
ID	Local IP : Ports	Remote IP : Ports	QoS Priority	Enable	Use Rule#
1	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
2	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
3	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
4	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
5	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
6	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
7	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always
8	<input type="text"/> : <input type="text"/>	<input type="text"/> : <input type="text"/>	High	<input type="checkbox"/>	(0) Always

Provide different priority to different users or data flows, or guarantee a certain level of performance.

### Enable

This Item enables QoS function or not.

### Bandwidth of Upstream

Set the limitation of upstream speed.

### Local: IP

Define the Local IP address of packets here.

### Local: Ports

Define the Local port of the packets in this field.

### Remote: IP

Define the Remote IP address of packets here.

### Remote: Ports

Define the Remote port of the packets in this field.

### QoS Priority

This defines the priority level of the current Policy Configuration. Packets associated with this policy will be serviced based upon the priority level set. For critical applications High or Normal levels are recommended. For non-critical applications select a Low level.

### User Rule#



The QoS item can work with Scheduling Rule number#. Please reference the section Advanced setting/schedule Rule.

**Click on “Save” to store your setting or “Undo” to give up**

## SNMP

WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR's MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

- Status
- System Log
- Dynamic DNS
- QoS
- SNMP
- Routing
- System Time
- Scheduling

Item	Setting
▶ Enable SNMP	<input type="checkbox"/> Local <input type="checkbox"/> Remote
▶ Get Community	<input type="text"/>
▶ Set Community	<input type="text"/>
▶ IP 1	<input type="text"/>
▶ IP 2	<input type="text"/>
▶ IP 3	<input type="text"/>
▶ IP 4	<input type="text"/>
▶ SNMP Version	<input checked="" type="radio"/> V1 <input type="radio"/> V2c
▶ WAN Access IP Address	<input type="text"/>

Save Undo

In brief, SNMP, the Simple Network Management Protocol, is a protocol designed to give a user the capability to remotely manage a computer network by polling and setting terminal values and monitoring network events.

### Enable SNMP

You must check Local, Remote or both to enable SNMP function. If Local is checked, this device will response request from LAN. If Remote is checked, this device will response request from WAN.

### Get Community

Setting the community of GetRequest your device will response.

### Set Community

Setting the community of SetRequest your device will accept.

IP 1, IP 2, IP 3, IP 4

Input your SNMP Management PC's IP here. User has to configure to where this device should send SNMP Trap message.

## SNMP Version

Please select proper SNMP Version that your SNMP Management software supports.

## WAN Access IP Address

If the user wants to limit to specific the IP address to access, please input in the item. The default 0.0.0.0 and means every IP of Internet can get some information of device with SNMP protocol.

Click on “Save” to store your setting or “Undo” to give up.

## Routing

The screenshot shows the configuration interface for a WiFi HSPA Gateway (R0.03a3). The top navigation bar includes 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary bar with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING' (selected), 'SMS', and 'TOOLBOX'. A left sidebar lists various settings: Status, System Log, Dynamic DNS, QoS, SNMP, Routing (selected), System Time, and Scheduling. The main content area is titled 'Routing Table' with a '[HELP]' link. It contains two sections: 'Dynamic Routing' with radio buttons for 'Disable' (selected), 'RIPv1', and 'RIPv2'; and 'Static Routing' with radio buttons for 'Disable' (selected) and 'Enable'. Below these is a table with 6 columns: ID, Destination, Subnet Mask, Gateway, Hop, and Enable. The table has 8 rows, each with input fields for the first five columns and a checkbox for the 'Enable' column. At the bottom of the table are 'Save' and 'Undo' buttons.

Routing Table [HELP]					
Item		Setting			
Dynamic Routing		<input checked="" type="radio"/> Disable <input type="radio"/> RIPv1 <input type="radio"/> RIPv2			
Static Routing		<input checked="" type="radio"/> Disable <input type="radio"/> Enable			
ID	Destination	Subnet Mask	Gateway	Hop	Enable
1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
6	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
7	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
8	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

Save Undo

## Routing Tables

Allow you to determine which physical interface address to use for outgoing IP data grams. If you have more than one routers and subnets, you will need to enable routing table to allow packets to find proper routing path and allow different subnets to communicate with each other.

Routing Table settings are settings used to setup the functions of static and dynamic routing.

## Dynamic Routing

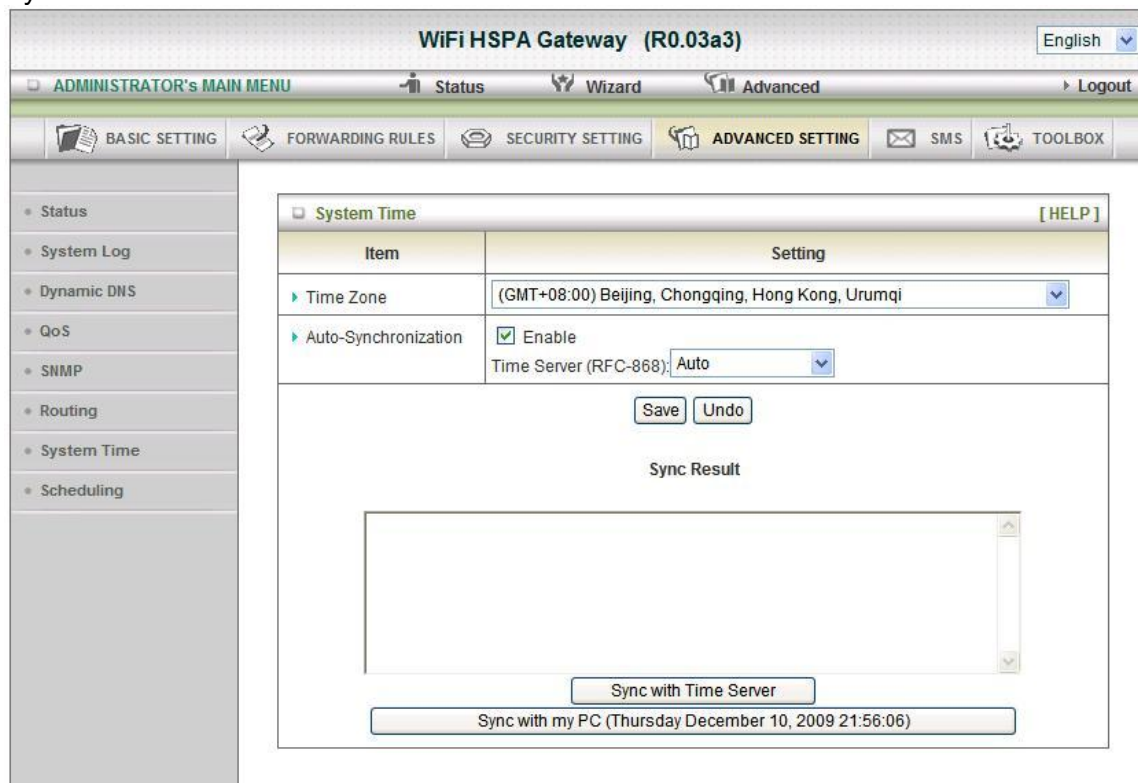
Routing Information Protocol (RIP) will exchange information about destinations for computing routes throughout the network. Please select RIPv2 only if you have different subnet in your network. Otherwise, please select RIPv1 if you need this protocol.

## Static Routing

For static routing, you can specify up to 8 routing rules. You can enter the destination IP address, subnet mask, Router, hop for each routing rule, and then enable or disable the rule by checking or un-checking the Enable checkbox.

Click on “Save” to store your setting or “Undo” to give up.

## System Time



WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR's MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

- Status
- System Log
- Dynamic DNS
- QoS
- SNMP
- Routing
- System Time
- Scheduling

**System Time** [HELP]

Item	Setting
Time Zone	(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
Auto-Synchronization	<input checked="" type="checkbox"/> Enable Time Server (RFC-868): Auto

Save Undo

Sync Result

Sync with Time Server

Sync with my PC (Thursday December 10, 2009 21:56:06)

### Time Zone

Select a time zone where this device locates.

### Auto-Synchronization

Select the “Enable” item to enable this function.

### Time Server

Select a NTP time server to consult UTC time

### Sync with Time Server

Select if you want to set Date and Time by NTP Protocol.

### Sync with my PC

Select if you want to set Date and Time using PC's Date and Time

Click on “Save” to store your setting or “Undo” to give up.

## Scheduling

The screenshot shows the 'Schedule Rule' configuration page in the WiFi HSPA Gateway (R0.03a3) web interface. The interface includes a top navigation bar with 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary navigation bar with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING' (selected), 'SMS', and 'TOOLBOX'. A left sidebar lists various system settings, with 'Scheduling' selected. The main content area is titled 'Schedule Rule' and contains a table for configuring rules. The table has columns for 'Rule#', 'Rule Name', and 'Action'. There are 10 rows, each with a 'New Add' button in the 'Action' column. Above the table, there is a 'Schedule' section with an 'Enable' checkbox. At the bottom of the table, there are navigation buttons: '<< Previous', 'Next >>', 'Save', and 'Add New Rule...'. A '[ HELP ]' link is located in the top right corner of the table area.

Item	Setting	
▶ Schedule	<input type="checkbox"/> Enable	
Rule#	Rule Name	Action
1		New Add
2		New Add
3		New Add
4		New Add
5		New Add
6		New Add
7		New Add
8		New Add
9		New Add
10		New Add

<< Previous   Next >>   Save   Add New Rule...   [ HELP ]

You can set the schedule time to decide which service will be turned on or off.

Select the “Enable” item. Press “Add New Rule” You can write a rule name and set which day and what time to schedule from “Start Time” to “End Time”. The following example configure “ftp time” as everyday 14:10 to 16:20

English v

**WiFi HSPA Gateway (R0.03a3)**

ADMINISTRATOR's MAIN MENU

 Status
 Wizard
 Advanced
 > Logout

BASIC SETTING
FORWARDING RULES
SECURITY SETTING
ADVANCED SETTING
SMS
TOOLBOX

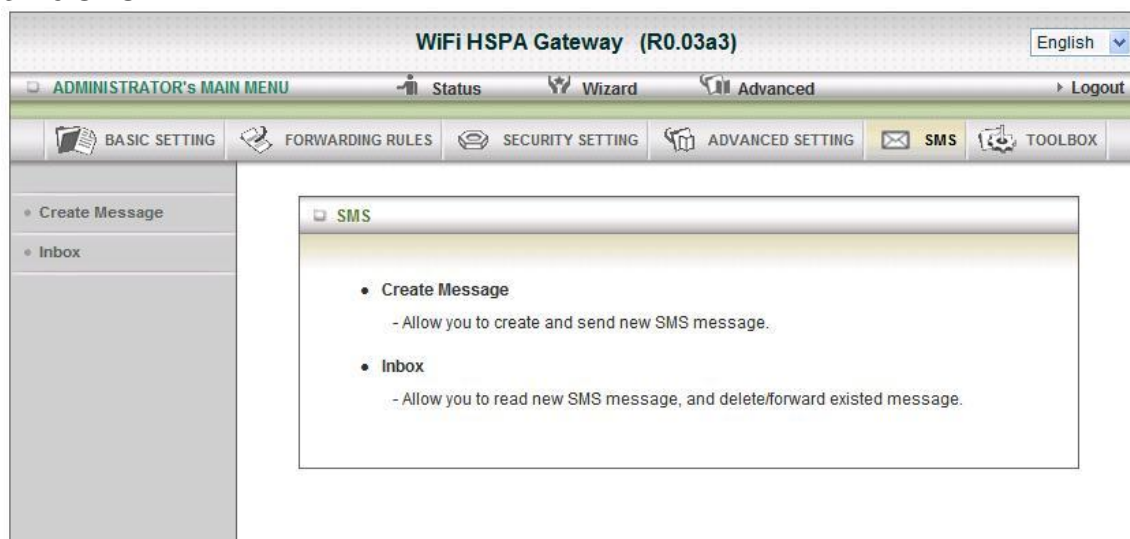
- Status
- System Log
- Dynamic DNS
- QoS
- SNMP
- Routing
- System Time
- **Scheduling**

Edit Schedule Rule
[ HELP ]

Item		Setting	
▶ Name of Rule 1		<input style="width: 100%;" type="text"/>	
▶ Policy		<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin-right: 5px;">Inactivate <span style="font-size: 0.8em;">v</span></div> <div>except the selected days and hours below.</div> </div>	
ID	Week Day	Start Time (hh:mm)	End Time (hh:mm)
1	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
2	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
3	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
4	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
5	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
6	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
7	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
8	<div style="border: 1px solid black; padding: 2px; display: inline-block;">-- choose one -- <span style="font-size: 0.8em;">v</span></div>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>
<div style="display: flex; justify-content: center; gap: 10px;"> <span style="border: 1px solid black; padding: 2px 10px;">Save</span> <span style="border: 1px solid black; padding: 2px 10px;">Undo</span> <span style="border: 1px solid black; padding: 2px 10px;">Back</span> </div>			

Click on “Save” to store your setting.

### 3.2.5 SMS



#### Create Message

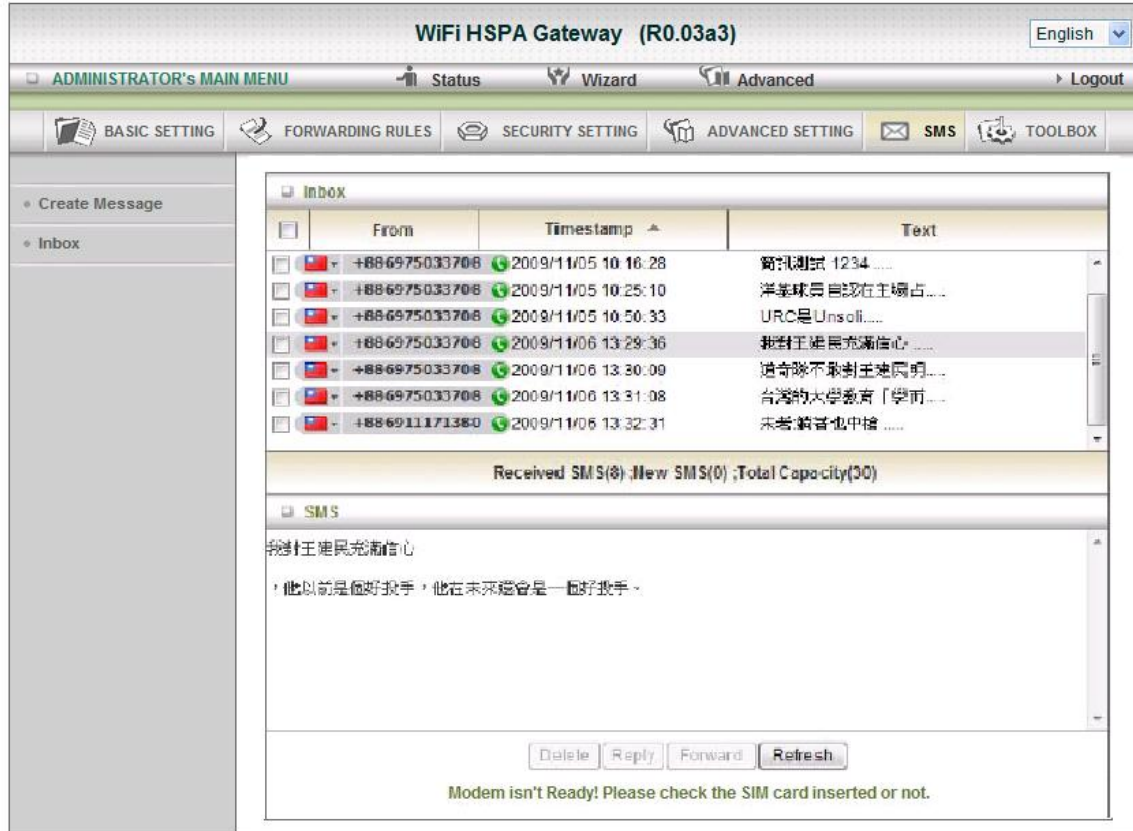
The screenshot shows the 'Create Message' form within the same interface. The sidebar now highlights 'Create Message'. The main content area is titled 'Create Message' and contains a table with two columns: 'Item' and 'Setting'.

Item	Setting
▶ Text message :	<div><div></div><div>Current input text length : 0 . The max. length of a message is 160 characters for pure alphabetical or numeric.</div></div>
▶ Receiver :	<div><div></div><div>Add '+' for international format of the phone number.</div></div>

At the bottom of the form are 'Send' and 'Cancel' buttons.

You can create a new SMS message on this page. After finishing content of message, and filling with phone number of receiver(s), pressing send button to send this message out. You can see “Send OK” if the new message has been sent successfully.

## Inbox



WiFi HSPA Gateway (R0.03a3) English

ADMINISTRATOR'S MAIN MENU Status Wizard Advanced Logout

BASIC SETTING FORWARDING RULES SECURITY SETTING ADVANCED SETTING SMS TOOLBOX

Create Message  
Inbox

**Inbox**

	From	Timestamp	Text
<input type="checkbox"/>	+886975033708	2009/11/05 10:16:28	資訊測試 1234 .....
<input type="checkbox"/>	+886975033708	2009/11/05 10:25:10	洋基球員 自認在主场占.....
<input type="checkbox"/>	+886975033708	2009/11/05 10:50:33	URC是Unsol.....
<input type="checkbox"/>	+886975033708	2009/11/06 13:29:36	我對王建民充滿信心.....
<input type="checkbox"/>	+886975033708	2009/11/06 13:30:00	這奇隊不敵謝王建民明.....
<input type="checkbox"/>	+886975033708	2009/11/06 13:31:08	台灣的大學教育「學而.....
<input type="checkbox"/>	+886911171380	2009/11/06 13:32:31	朱雲:錯音也中槍.....

Received SMS(8): New SMS(0), Total Capacity(30)

**SMS**

我對王建民充滿信心  
，他以前是個好投手，他在未來還會是一個好投手。

Delete Reply Forward Refresh

Modem isn't Ready! Please check the SIM card inserted or not.

You can read, delete, reply, and forward messages. Just click on one from the SMS lists, then you can view the whole content of it in the SMS window below.

### Refresh:

You can press “Refresh” button to renew SMS lists.

### Delete, Reply, Forward Messages:

After reading message, you can check the checkbox on the left of each message to delete, reply, or forward this message.



### 3.2.6 Tool Box

The screenshot displays the administrator interface for a WiFi HSPA Gateway (R0.03a3). The interface has a top navigation bar with the title "WiFi HSPA Gateway (R0.03a3)" and a language dropdown set to "English". Below this is a secondary bar with "ADMINISTRATOR's MAIN MENU" and links for "Status", "Wizard", "Advanced", and "Logout". A third bar contains icons for "BASIC SETTING", "FORWARDING RULES", "SECURITY SETTING", "ADVANCED SETTING", "SMS", and "TOOLBOX". The left sidebar lists menu items: "System Info", "PIN Control", "Firmware Upgrade", "Backup Setting", "Reset to Default", "Reboot", and "Miscellaneous". The main content area shows the "Toolbox" window with a list of tools and their descriptions:

- **View Log**
  - View the system logs.
- **Firmware Upgrade**
  - Prompt the administrator for a file and upgrade it to this device.
- **Backup Setting**
  - Save the settings of this device to a file.
- **Reset to Default**
  - Reset the settings of this device to the default values.
- **Reboot**
  - Reboot this device.
- **Miscellaneous**
  - MAC Address for Wake-on-LAN: Let you to power up another network device remotely.
  - Domain Name or IP address for Ping Test: Allow you to configure an IP, and ping the device. You can ping a specific IP to test whether it is alive.



## System Info

WiFi HSPA Gateway (R0.03a3)

English

ADMINISTRATOR's MAIN MENU

Status

Wizard

Advanced

Logout

BASIC SETTING

FORWARDING RULES

SECURITY SETTING

ADVANCED SETTING

SMS

TOOLBOX

- System Info
- PIN Control
- Firmware Upgrade
- Backup Setting
- Reset to Default
- Reboot
- Miscellaneous

System Information

Item	Setting
WAN Type	3G
Display time	Thu, 10 Dec 2009 21:59:54 +0800

System Log

Time	Log
Dec 10 21:04:05	pppd[7518]: sent [IPCP ConfReq id=0x2 <addr 0.0.0.0> <ms-dns1 10.11.12.13> <ms-dns3 10.11.12.14> <ms-wins 10.11.12.13> <ms-wins 10.11.12.14>]
Dec 10 21:04:05	commander: CSID00160001 read err -61
Dec 10 21:04:06	pppd[7518]: rcvd [IPCP ConfNak id=0x2 <ms-dns1 10.11.12.13> <ms-dns3 10.11.12.14> <ms-wins 10.11.12.13> <ms-wins 10.11.12.14>]
Dec 10 21:04:06	pppd[7518]: sent [IPCP ConfReq id=0x3 <addr 0.0.0.0> <ms-dns1 10.11.12.13> <ms-dns3 10.11.12.14> <ms-wins 10.11.12.13> <ms-wins 10.11.12.14>]
Dec 10 21:04:07	pppd[7518]: rcvd [IPCP ConfNak id=0x3 <ms-dns1 10.11.12.13> <ms-dns3 10.11.12.14> <ms-wins 10.11.12.13> <ms-wins 10.11.12.14>]
Dec 10 21:04:07	pppd[7518]: sent [IPCP ConfReq id=0x4 <addr 0.0.0.0> <ms-dns1 10.11.12.13> <ms-dns3 10.11.12.14> <ms-wins 10.11.12.13> <ms-wins 10.11.12.14>]
Dec 10 21:04:07	commander: STOP WANTYPE 3G
Dec 10 21:04:07	pppd[7518]: Terminating on signal 15

Page: 1/64 (Log Number: 949)

<< Previous

Next >>

First Page

Last Page

Refresh

Download

Clear logs

You can view the System Information and System log, and download/clear the System log, in this page.

## PIN Control

The screenshot shows the 'PIN Control' settings page in the 'ADMINISTRATOR's MAIN MENU'. The page is titled 'WiFi HSPA Gateway (R0.03a3)' and has a language dropdown set to 'English'. The main menu includes 'Status', 'Wizard', 'Advanced', and 'Logout'. The left sidebar lists various system functions: System Info, PIN Control, Firmware Upgrade, Backup Setting, Reset to Default, Reboot, and Miscellaneous. The main content area is divided into two sections: 'PIN CODE Request function' and 'PIN CODE Change function'.

**PIN CODE Request function**

Item	Setting
PIN CODE Request function :	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
Input SIM PIN code :	<input type="text"/>

Warning : 3 more tries allowed.

**PIN CODE Change function**

Item	Setting
Old pin code:	<input type="text"/>
New pin code:	<input type="text"/>
Verify pin code:	<input type="text"/>

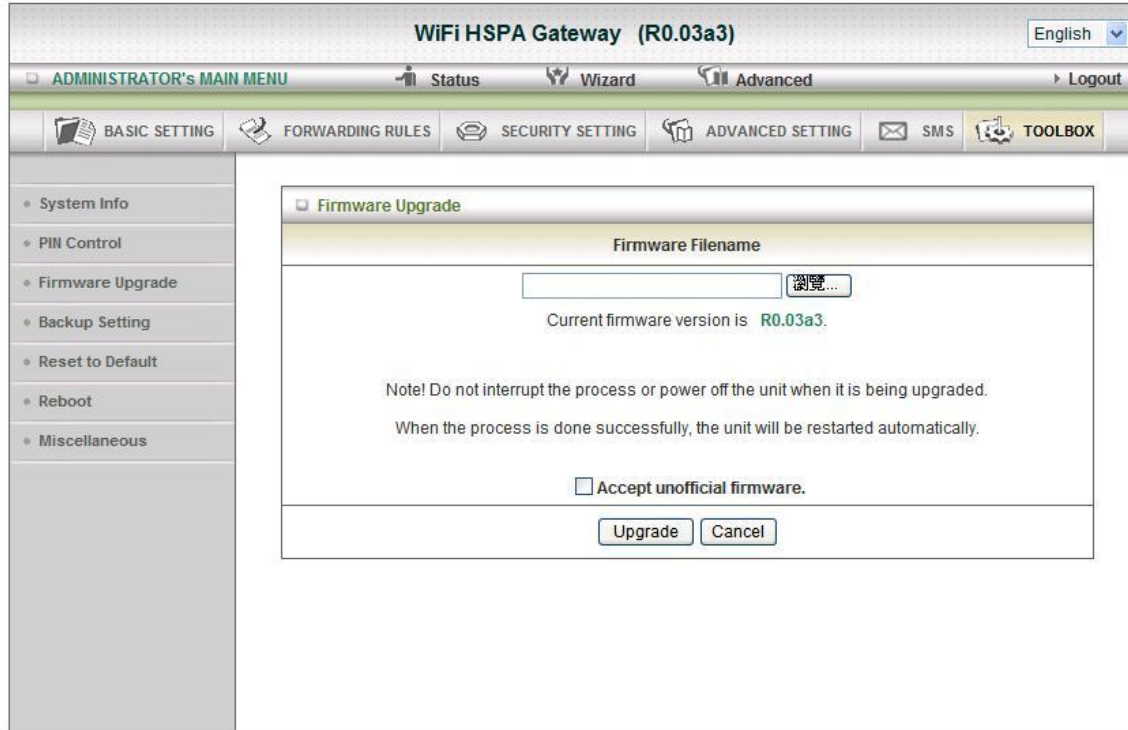
You can enable/disable the PIN Code control function, or change the PIN code.

1. PIN Code request function: Enable or Disable the PIN Code Request function.
2. Input SIM PIN code: Input the correct PIN code before the press the "save" button.
3. PIN Code charge function: change the PIN code on the SIM card.

Warring:

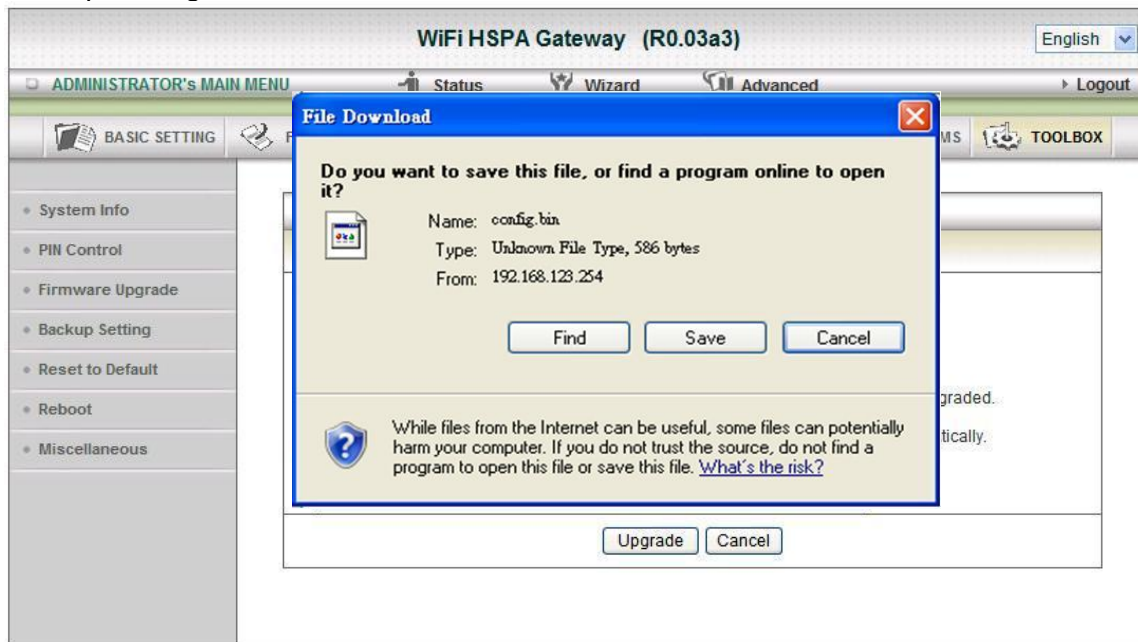
1. The SIM Card will be lock if retry more than 3 times.
2. The Page supports the Unlock SIM function too. You must get the PUK code from ISP first.

## Firmware Upgrade



You can upgrade firmware by clicking “Upgrade” button.

## Backup Setting



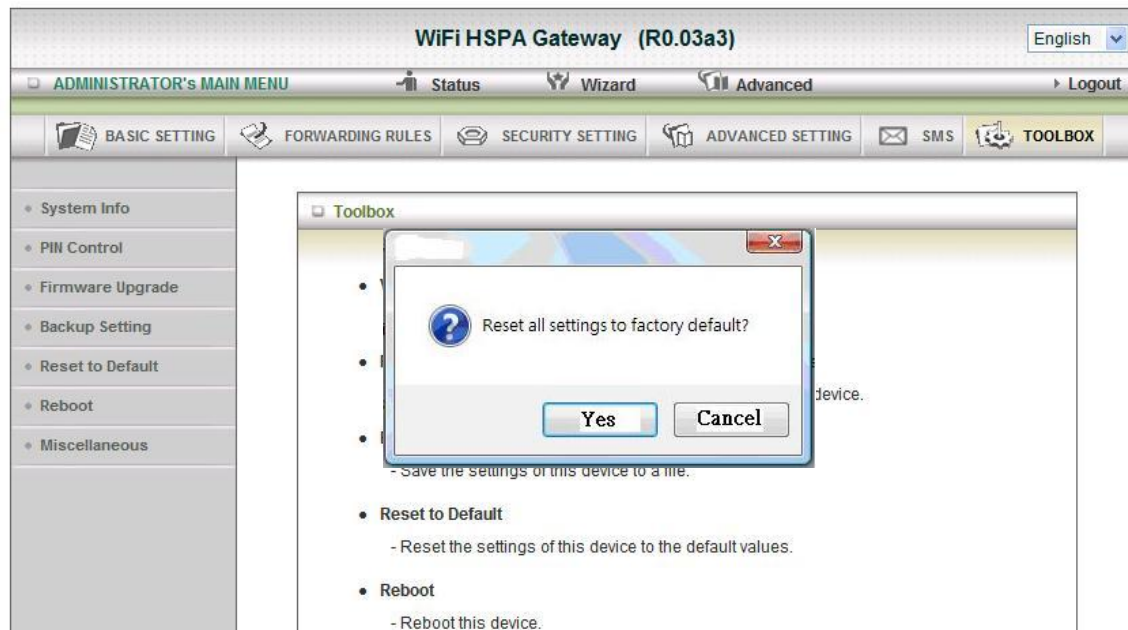
You can backup your settings by clicking the “**Backup Setting**” button and save it as a bin file. Once you want to restore these settings, please click Firmware Upgrade button and use the bin file you saved.

## Reset to Default



You can also reset this product to factory default by clicking the **Reset to default** button.

## Reboot



You can also reboot this it by clicking the **Reboot** button.

## Miscellaneous

The screenshot shows the web interface of a WiFi HSPA Gateway (R0.03a3). The top navigation bar includes 'ADMINISTRATOR's MAIN MENU', 'Status', 'Wizard', 'Advanced', and 'Logout'. Below this is a secondary menu with 'BASIC SETTING', 'FORWARDING RULES', 'SECURITY SETTING', 'ADVANCED SETTING', 'SMS', and 'TOOLBOX'. The left sidebar lists various system settings: 'System Info', 'PIN Control', 'Firmware Upgrade', 'Backup Setting', 'Reset to Default', 'Reboot', and 'Miscellaneous'. The main content area is titled 'Miscellaneous Items' and contains a table with two columns: 'Item' and 'Setting'. The table has two rows: 'MAC Address for Wake-on-LAN' with a 'Wake up' button, and 'Domain Name or IP address for Ping Test' with a 'Ping' button. At the bottom of the table are 'Save' and 'Undo' buttons.

Item	Setting
▶ MAC Address for Wake-on-LAN	<input type="text"/> <input type="button" value="Wake up"/>
▶ Domain Name or IP address for Ping Test	<input type="text"/> <input type="button" value="Ping"/>

### Domain Name or IP address for Ping Test

Allow you to configure an IP, and ping the device. You can ping a specific IP to test whether it is alive.

# Chapter 4 Troubleshooting

This Chapter provides solutions to problems for the installation and operation of the 802.11n Wireless HSPA Router. You can refer to the following if you are having problems.

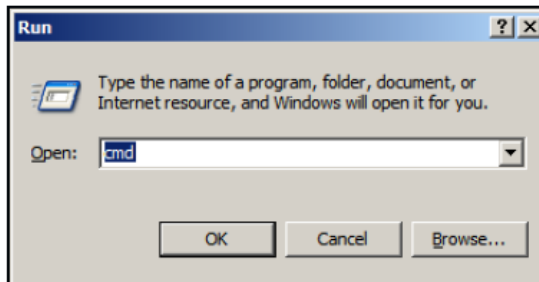
## 1 Why can't I configure the router even the cable is plugged and the LED is lit?

Do a **Ping test** to make sure that the 802.11n Wireless HSPA Router

**Note:** It is recommended that you use an Ethernet connection to configure it

Go to **Start > Run**.

1. Type **cmd**.



2. Press **OK**.
3. Type **ipconfig** to get the IP of default Router.
4. Type **"ping 192.168.123.254"**. Assure that you ping the correct IP Address assigned to the WiFi HSPA IAD. It will show four replies if you ping correctly.

```
Pinging 192.168.123.254 with 32 bytes of data:
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
```

Ensure that your Ethernet Adapter is working, and that all network drivers are installed properly. Network adapter names will vary depending on your specific adapter. The installation steps listed below are applicable for all network adapters.

1. Go to **Start > Right click on "My Computer" > Properties**.
2. **Select the Hardware Tab**.
3. Click **Device Manager**.
4. Double-click on **"Network Adapters"**.
5. Right-click on **Wireless Card bus Adapter** or **your specific network adapter**.
6. Select **Properties** to ensure that all drivers are installed properly.

7. Look under **Device Status** to see if the device is working properly.
8. Click **"OK"**.

## **2 What can I do if my Ethernet connection does not work properly?**

- A. Make sure the RJ45 cable connect with the router.
- B. Ensure that the setting on your Network Interface Card adapter is "Enabled".
- C. If settings are correct, ensure that you are not using a crossover Ethernet cable, not all Network Interface Cards are MDI/MDIX compatible, and use a patch cable is recommended.
- D. If the connection still doesn't work properly, then you can reset it to default.

## **3 Problems with 3G connection?**

### **A. What can I do if the 3G connection is failed by Auto detection?**

Maybe the device can't recognize your ISP automatically. Please select "Manual" mode, and filling in dial-up settings manually.

### **B. What can I do if my country and ISP are not in the list?**

Please choose "Others" item from the list, and filling in dial-up settings manually.

### **C. What can I do if my 3G connection is failed even the dongle is plugged?**

Please check the following items:

- I. Make sure you have inserted a validated SIM card in the 3G data card, and the subscription from ISP is still available
- II. If you activate PIN code check feature in SIM card, making sure the PIN code you fill in dial-up page is correct
- III. Checking with your ISP to see all dial-up settings are correct
- IV. Make sure 3G signal from your ISP is available in your environment

### **D. What can I do if my router can't recognize my 3G data card even it is plugged?**

There might be compatibility issue with some certain 3G cards. Please check the latest compatibility list to see if your 3G card is already supported.

### **E. What should I insert in APN, PIN Code, Account, Password, Primary DNS, and Secondary DNS?**

The device will show this information after you choose country and Telcom. You can also check these values with your ISP.

### **F. Which 3G network should I select?**

It depends on what service your ISP provide. Please check your ISP to know this information.

### **G. Why my 3G connection is keep dropping?**

Please check 3G signal strength from your ISP in your environment is above middle

level.

## 4 Something wrong with the wireless connection?

### A. Can't setup a wireless connection?

- I. Ensure that the SSID and the encryption settings are exactly the same to the Clients.
- II. Move the 802.11n Wireless HSPA Router and the wireless client into the same room, and then test the wireless connection.
- III. Disable all security settings such as **WEP**, and **MAC Address Control**.
- IV. Turn off the 802.11n Wireless HSPA Router and the client, then restart it and then turn on the client again.
- V. Ensure that the LEDs are indicating normally. If no, make sure that the AC power and Ethernet cables are firmly connected.
- VI. Ensure that the IP Address, subnet mask, Router and DNS settings are correctly entered for the network.
- VII. If you are using other wireless device, home security systems or ceiling fans, lights in your home, your wireless connection may degrade dramatically. Keep your product away from electrical devices that generate RF noise such as microwaves, monitors, electric motors...

### B. What can I do if my wireless client can not access the Internet?

- I. Out of range: Put the router closer to your client.
- II. Wrong SSID or Encryption Key: Check the SSID or Encryption setting.
- III. Connect with wrong AP: Ensure that the client is connected with the correct Access Point.
  - i. **Right-click** on the **Local Area Connection icon** in the taskbar.
  - ii. Select **View Available Wireless Networks in Wireless Configure**. Ensure you have selected the correct available network.
  - iii. Reset the 802.11n Wireless HSPA Router to default setting

### C. Why does my wireless connection keep dropping?

- I. Antenna Orientation.
  - i. Try different antenna orientations for the 802.11n Wireless HSPA Router.
  - ii. Try to keep the antenna at least 6 inches away from the wall or other objects.
- II. Try changing the channel on the 802.11n Wireless HSPA Router, and your Access Point and Wireless adapter to a different channel to avoid interference.
- III. Keep your product away from electrical devices that generate RF noise, like microwaves, monitors, electric motors, etc.



## 5 What to do if I forgot my encryption key?

1. Go back to advanced setting to set up your Encryption key again.
2. Reset the 802.11n Wireless HSPA Router to default setting

## 6 How to reset to default?

1. Ensure the 802.11n Wireless HSPA Router is powered on
2. Find the **Reset** button on the right side
3. Press the **Reset** button for 8 seconds and then release.
4. After the 802.11n Wireless HSPA Router reboots, it has back to the factory **default** settings.

## Appendix A Spec Summary Table

Device Interface		CDG561AM
Wireless WAN	USB 2.0 for internal HSPA modem	1
Ethernet WAN/LAN	RJ-45 port, 10/100Mbps, 1xWAN / 4xLAN	1
Antenna	2 x PIFA internal antennas	2
WPS Button	For WPS connection	1
Reset Button	Reset router setting to factory default	1
LED Indication	Status / 3G signal Strength / 2.XG / 3.XG / SMS / WAN / LAN / WiFi	•
Power Button	Power ON/OFF button	1
Power Jack	Power Jack, DC 12V/2A	1
SIM Card Slot	For SIM card that users get from Telecom	1
<b>Wireless LAN (WiFi)</b>		
Standard	IEEE 802.11b/g/n (2x2) compliance	•
SSID	SSID broadcast or in stealth mode	•
Channel	Auto-selection, manually	•
Security	WEP, WPA-PSK, WPA2-PSK, WPA, WPA2	•
WPS	WPS (Wi-Fi Protected Setup)	•
<b>Functionality</b>		
Wireless WAN	PPP (for HSPA)	•
Ethernet WAN	PPPoE, DHCP client, Static IP, PPTP, L2TP	•
WAN Connection	Auto-reconnect, dial-on-demand, manually	•
One-to-Many NAT	Virtual server, Special application, DMZ	•
SPI Firewall	IP/Service filter, URL blocking, MAC control	•
DoS Protection	DoS (Deny of Service) detection and protection	•
Management	SNMP, UPnP IGD, syslog	•
Administration	Web-based UI, remote login, backup/restore setting	•
<b>Environment &amp; Certification</b>		
Package Information	Device dimension (mm)	•
	Package dimension (mm)	•
	Package weight (g)	•
Operation Temp.	Temp.: 0~40°C, Humidity 10%~90% non-condensing	•
Storage Temp.	Temp.: -10~70°C, Humidity: 0~95% non-condensing	•
EMI Certification	CE/FCC	•
RoHS	RoHS compliance	•

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Linux-2.6.21 system kernel

busybox\_1\_00\_rc2

bridge-utils 0.9.5

dhcpcd-1.3

ISC DHCP V2 P5

syslogd spread from busybox

wireless tools

ntpclient of NTP client implementation

GNU Wget

Availability of source code

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